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APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/619,411	07/19/2000	Jeffrey Lynn Eakin	108.0001

Peter H Priest
Law Offices of Peter H Priest
529 Dogwood Drive
Chapel Hill, NC 27516

FORMALITIES LETTER



OC000000005394773

Date Mailed: 09/13/2000

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.
A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- The balance due by applicant is \$ 130.

*A copy of this notice **MUST** be returned with the reply.*



Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 3 - OFFICE COPY

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QY 361 RGEICELLETTSNSNEDSIAGPIVPEMAOGEAOMFOEAKNLNEQLRAATTSAPRHS 420
DB 361 RGEICELLETTSNSNEDSIAGPIVPEMAOGEAOMFOEAKNLNEQLRAATTSAPRHS 420
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DB 1381 HPQSKYLLIQKWLIPFSPIQK 1403

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RESULT 2
US-09-705-872-3
; Sequence 3, Application US/09705872
; Patent No. 6617429
; GENERAL INFORMATION:
; APPLICANT: Kenji YAMAMOTO
; TITLE OF INVENTION: APOPTOSIS INHIBITORY PROTEIN, GENE ENCODING THE PROTEIN
; FILE REFERENCE: 2000-1110/LC/00653
; CURRENT FILING DATE: US/09/705,872
; PRIOR FILING DATE: 2000-11-06
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 3
; LENGTH: 1295
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-705-872-3

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Query Match          91.6%; Score 6691; DB 4; Length 1295;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 1282; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

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QY 1 MATQKASDERISQPDHNLPELSALGLDAVOLAKELKEEERAKMKQKGNQMRSE 60
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DB 61 AKRLTFVYBEPYSSWITQEMAAAGFYFTGVKSGIOCFCCSLILFGAGLTRLPIDHKRF 120
QY 121 HPDCGFLNKGVDNIAKVDIRVKVLSKRLGKKRWQEEBARLASRRNPFYQGISPCV 180
DB 121 HPDCGFLNKGVDNIAKVDIRVKVLSKRLGKKRWQEEBARLASRRNPFYQGISPCV 180
QY 181 LSEAGFVYTGKODIVQCFSCGGCLGNWEEGDDPWKEHAKFPKCEPLRSKSSSEITQYI 240
DB 181 LSEAGFVYTGKODIVQCFSCGGCLGNWEEGDDPWKEHAKFPKCEPLRSKSSSEITQYI 240
QY 241 QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFQDWRBSAVGAALA 300
DB 241 QSYKGFVDITGEHFVNSWVQRELPMASAYCNDSIFAYEELRLDSFQDWRBSAVGAALA 300
QY 301 KAGLFYTGIDIVQCFSCGGCLEKWOEGDPLDHTRCFPNCPFLQNMKSASEVTPILOS 360
DB 301 KAGLFYTGIDIVQCFSCGGCLEKWOEGDPLDHTRCFPNCPFLQNMKSASEVTPILOS 360
QY 361 RGEICELLETTSNSNEDSIAGPIVPEMAOGEAOMFOEAKNLNEQLRAATTSAPRHS 420
DB 361 RGEICELLETTSNSNEDSIAGPIVPEMAOGEAOMFOEAKNLNEQLRAATTSAPRHS 420
QY 421 LDISSDATDHLGCDLSIASKHSKPVQEBVLVPEVFGNLNSVMCEGASGKTVLL 480
DB 421 LDISSDATDHLGCDLSIASKHSKPVQEBVLVPEVFGNLNSVMCEGASGKTVLL 480
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DB 661 FDDVAVERKSWERLSLNKATAELIKATVSSCGELAKGFFSCCFEPNDDLAEGVDED 720

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DB 781 PMMTVSAYNNFLNYSVSLPSTKAGPKIVSHLHLVDNKSLENI SENDDYLKHQPEISIQ 840
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DB 1201 SLEPNFSLKTLNLEGQOPDEETSEKFAVYILGSLSLNEBELPTGGGITYRAKLIIOCCQ 1260
QY 1261 QLHCLRVLSFFKTLNDSDVVEIAKV 1285
DB 1261 QLHCLRVLSFFKTLNDSDVVEIGEL 1285

RESULT 3
US-08-836-134-2
Sequence 2, Application US/08836134A
GENERAL INFORMATION:
PATENT No. 6020127
APPLICANT: Mackenzie, Alex E.
APPLICANT: Kornejuk, Robert G.
APPLICANT: Mahadevan, Mani S.
APPLICANT: McLean, Michael
APPLICANT: Roy, Natalie
TITLE OF INVENTION: Neuronal Apoptosis Inhibitor Protein, Gene Sequence and
Patent No. 6020127
TITLE OF INVENTION: Mutations Causative of Spinal Muscular Atrophy
FILE REFERENCE: 3477-112, 033477/139914
CURRENT APPLICATION NUMBER: US/08/836.134A
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Patent In Ver. 2.0
SEQ ID NO 2
LENGTH: 1232
TYPE: PRT
ORGANISM: Homo sapiens
US-08-836-134-2

Query Match 87.2%; Score 6373.5; DB 3; Length 1232;
Best Local Similarity 95.9%; Pred. No. 0;
Matches 1229; Conservative 1; Mismatches 1; Indels 51; Gaps 1;

QY 1 MATOQKASDERISQFDHNLPELSALLGLDAVOLAKELBEBOKERAKMKGYNQMRSE 60
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DB 61 AKRLKFTVYEPYSSNIPQEMAAAGYFTGVSGICGCCSILTFGAGLTRLPEDHKRF 120
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DB 121 HPDCGFLNKDVGNIAKYDIRVKNLSRLRGGMRYOEBEARLASFRMPFYVQGISPCV 180
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DB 181 LSEBAGVFTGGKODTVCCSGCGGLGWBEGBDPMKHAAMFKPCETLRSKKSSEETQYI 240
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DB 241 QSYKGFVDITGSHFNVSWMQRELPMASAYCNDSIFAYEBLRDSFQDMRESAVGAALA 300
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DB 481 KKIAPFAMAGCCPFLNRFOLVLFYLSLSTRPEGLASIIDQULEKEGSTEKMBENIIQ 540
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DB 661 PDDVAVFKSYMERLSLRNKATAEILKATVSSCGELAKGFSCCFEENDDLAEAGVDD 720
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DB 721 EDLTMCLMSKFTAQRLRPFRFLSPAFOEFLAGMRLLIELLSDROEHODLGLVHLKQINS 780
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DB 781 PMMTVSAYNNFLNYSVSLPSTKAGPKIVSHLHLVDNKSLENI SENDDYLKHQPEISIQ 840
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DB 841 MQLRLGMOICPOAYSMVSEHLVLAALKTAQOSNTVAACSFPVLOFLOGRTLTLCALNL 900
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DB 901 QYFFDHPESLSLRSIHFPRIKGNKTSBRAHFSVLETCFDSKQVPTIDODYASAFEBPMNEW 960
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DB 1021 MTVFSASQRIELHLNHSRGFTIESIRPALELSKASVTKCSISKLELSAAEQELLTLPSLE 1080
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Db      1150 SLPNFISIKIINLEGOQFPDEETSEKFAVILGSLNLEELLPTGDIYRAKLIIOQCO 1209
QY      1261 QLHCLRVLSFEKTLNDSVVEI 1282
Db      1210 QLHCLRVLSFEKTLNDSVVEI 1231

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RESULT 4 US-09-493-784-2

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; Sequence 2, Application US/09493784
; Patent No. 6429011
; GENERAL INFORMATION:
; APPLICANT: Mackenzie, Alex E.
; APPLICANT: Korneljuk, Robert G.
; APPLICANT: Mahadevan, Mani S.
; APPLICANT: McLean, Michael
; APPLICANT: Roy, Natalie
; APPLICANT: Ikeda, John-e
; TITLE OF INVENTION: Neuronal Apoptosis Inhibitor Protein, Gene Sequence and
; Patent No. 6429011
; FILE REFERENCE: Mutations Causative of Spinal Muscular Atrophy
; CURRENT APPLICATION NUMBER: US/09/493,784
; CURRENT FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: 08/836,134
; PRIOR FILING DATE: 1997-06-20
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 2
; LENGTH: 1232
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-493-784-2

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Query Match      87.2%; Score 6373.5; DB 4; Length 1232;
Best Local Similarity 95.9%; Pred. No. 0;
Matches 1229; Conservative 1; Mismatches 1; Indels 51; Gaps 1;

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QY      1 MATOQKASDERISOPDHNLPETLSLLGLDAVOLAKELSEEBQEKERAKMOGNSQMRSE 60
Db      1 MATOQKASDERISOPDHNLPETLSLLGLDAVOLAKELSEEBQEKERAKMOGNSQMRSE 60
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Db      61 ARRLKTPVTPYEPYSSWIPQEMAAAGFYFTGVKSGIOCFCCSLTLFGAGLTRLPIDHKRF 120
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Db      121 HPDGGFLANKOVGNIAKXDIRVVKLKGRLKGMRYQEEEARLASFRNMPFYVQGISPCV 180
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Db      241 QSYKGFVDITGEHFVNSWVORELPMASAYCNDISIFAYEELRLDSFKOMPRESAVGVAALA 300
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Db      481 KIIAFLMAGCCCFLLNRFQVFLVLSSTRPDELSAIIIDOLLEKSGSVTECMRNIIQ 540
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QY      661 FDDVAVFKSYMERLSIRNKATAEILKATVSSCGELALGFPSCCFEFPNDDLAAGVDED 720
Db      661 FDDVAVFKSYMERLSIRNKATAEILKATVSSCGELALGFPSCCFEFPNDDLAAGVDED 720
QY      721 EDLTMCLMSKFTAOIRLRFYRFLSPAFOEFLAGRLIELDSDRQEHODIGLYHLKQINS 780
Db      721 EDLTMCLMSKFTAOIRLRFYRFLSPAFOEFLAGRLIELDSDRQEHODIGLYHLKQINS 780
QY      781 PMMTVASANNFNTVYSSIPSTKAGPKIVSHLHVDNKESLENISENDVLRKHQPEISIQ 840
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QY      901 QYFDPHPSLSILSIFHPPIRGKNTSPRAHFSVLETCFDPKSGVPTIIDDYASAFEPNMW 960
Db      901 QYFDPHPSLSILSIFHPPIRGKNTSPRAHFSVLETCFDPKSGVPTIIDDYASAFEPNMW 960
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Db      961 ERNLAEKEDNVKSYMQRASPDLSGTGYWKLSPQOYKIPCLEVDVNDIDVAGDMLEIL 1020
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Db      1021 MTVFSASQRIEHLNHSRGFISIRPALELSKASTYKSIKLELSAAEOBELTLTPSLE 1080
QY      1081 SLEVSGETIOSQOIRPNLDKFLCKELSEVDLEGNINVSFVPEEPFPHMEKLLIQISA 1140
Db      1081 SLEVSGETIOSQOIRPNLDKFLCKELSEVDLEGNINVSFVPEEPFPHMEKLLIQISA 1140
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Db      1141 EYDPSKLT-----VA 1149
QY      1201 SLPNFISIKIINLEGOQFPDEETSEKFAVILGSLNLEELLPTGDIYRAKLIIOQCO 1260
Db      1150 SLPNFISIKIINLEGOQFPDEETSEKFAVILGSLNLEELLPTGDIYRAKLIIOQCO 1209
QY      1261 QLHCLRVLSFEKTLNDSVVEI 1282
Db      1210 QLHCLRVLSFEKTLNDSVVEI 1231

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RESULT 5 US-08-836-134-23

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; Sequence 23, Application US/08836134A
; Patent No. 6020127
; GENERAL INFORMATION:
; APPLICANT: Mackenzie, Alex E.
; APPLICANT: Korneljuk, Robert G.
; APPLICANT: Mahadevan, Mani S.
; APPLICANT: McLean, Michael
; APPLICANT: Roy, Natalie
; APPLICANT: Ikeda, John-e
; TITLE OF INVENTION: Neuronal Apoptosis Inhibitor Protein, Gene Sequence and

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Patent No. 6020127
 TITLE OF INVENTION: Mutations Causative of Spinal Muscular Atrophy
 FILE REFERENCE: 3477-112, 033477/139914
 CURRENT APPLICATION NUMBER: US/08/836,134A
 CURRENT FILING DATE: 1997-06-20
 NUMBER OF SEQ ID NOS: 23
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO 23
 LENGTH: 1151
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-08-836-134-23

Query Match 81.5%; Score 5955; DB 3; Length 1151;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 1139; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MATOQKASDERISQFDHNLPELSALLGLDAVOLAKELBEEBOKERAKMGKYNQMRSE 60
 DB 10 MATOQKASDERISQFDHNLPELSALLGLDAVOLAKELBEEBOKERAKMGKYNQMRSE 69
 QY AKRLKTFVYIEPYSWIPQEMAAAGFYFTGVKSGIOCFCCSLIFGAGLTRLPIDHKKR 120
 DB AKRLKTFVYIEPYSWIPQEMAAAGFYFTGVKSGIOCFCCSLIFGAGLTRLPIDHKKR 129
 QY 121 HPDCCGLLNKDVGNIAKYDIRVKNLKSRLRGKMRVQEBEARLSPRNMPFYQGISPCV 180
 DB 130 HPDCCGLLNKDVGNIAKYDIRVKNLKSRLRGKMRVQEBEARLSPRNMPFYQGISPCV 189
 QY 181 LBSAGFVFTGKODTVQFCSCGCGCLGNWBEGBDPMKEHAKMPKCEPLRSKXSEBITOYI 240
 DB 190 LBSAGFVFTGKODTVQFCSCGCGCLGNWBEGBDPMKEHAKMPKCEPLRSKXSEBITOYI 249
 QY 241 QSYKGFVDITGEHFVNSWQRELPMASAYCNDISIFAYEELRLDSFQDMPRESAVGAALA 300
 DB 250 QSYKGFVDITGEHFVNSWQRELPMASAYCNDISIFAYEELRLDSFQDMPRESAVGAALA 309
 QY 301 KAGLPYTGIDYIOVCFSCGCGCLEMOBGGDDPLDHTFCFPCNCFPLQNMKSAEVTPLDLOS 360
 DB 310 KAGLPYTGIDYIOVCFSCGCGCLEMOBGGDDPLDHTFCFPCNCFPLQNMKSAEVTPLDLOS 369
 QY 361 RGELELLETTSBSNLEDSIAGVPIVEMAQGEAOMFOEAKNLEQRLAAVTSASFRHMS 420
 DB 370 RGELELLETTSBSNLEDSIAGVPIVEMAQGEAOMFOEAKNLEQRLAAVTSASFRHMS 429
 QY 421 LLDISSDLATDHLGCDLSIASKHISKPVQEPVLPEVFGNLSVMCWEBASGKTVLL 480
 DB 430 LLDISSDLATDHLGCDLSIASKHISKPVQEPVLPEVFGNLSVMCWEBASGKTVLL 489
 QY 481 KXIAFLMASGCCPLNRFQVFLSLSTRPDEGLASITCDOLLEKRGSTVMCMNIIQ 540
 DB 490 KXIAFLMASGCCPLNRFQVFLSLSTRPDEGLASITCDOLLEKRGSTVMCMNIIQ 549
 QY 541 QLNQOVLFLDDYKEICSIPOVIGKLIQKNHLSRTCLLAVRTRNRAJRYLETILEIK 600
 DB 550 QLNQOVLFLDDYKEICSIPOVIGKLIQKNHLSRTCLLAVRTRNRAJRYLETILEIK 609
 QY 601 APPFYNTVCLIRKLFSSNMTRLRKFMVYFGKNSLOKIQTRPRVPAICAHMYYPPDPS 660
 DB 610 APPFYNTVCLIRKLFSSNMTRLRKFMVYFGKNSLOKIQTRPRVPAICAHMYYPPDPS 669
 QY 661 FDDVAVFKSYMERLSLRNKATAEILKATVSCGELAKGFFSCCFERNDDLEAGVDED 720
 DB 670 FDDVAVFKSYMERLSLRNKATAEILKATVSCGELAKGFFSCCFERNDDLEAGVDED 729
 QY 721 EDLTWCLMSKFTAQRLRPFYRFLSPAFQEBLAGMRLIELLSDRQEHQDGLVHLKQINS 780
 DB 730 EDLTWCLMSKFTAQRLRPFYRFLSPAFQEBLAGMRLIELLSDRQEHQDGLVHLKQINS 789
 QY 781 PMMTVAGYNNFLVYSSLESTKAGPKIVSHLLHVDNKESLENISENDVTLKIQPEISLQ 840
 DB 790 PMMTVAGYNNFLVYSSLESTKAGPKIVSHLLHVDNKESLENISENDVTLKIQPEISLQ 849

QY 841 MQLRLGLMOICPOAYFSWVSEHLLVALKTAAYQSNVTAAACSPFVQLQGRITLTGALNL 900
 DB 850 MQLRLGLMOICPOAYFSWVSEHLLVALKTAAYQSNVTAAACSPFVQLQGRITLTGALNL 909
 QY 901 QYFFDHPESLSLRSTHFPTRGNKTSPPRAHFSVLEFCFDKSNQVPTIDQYASAFEPMNEM 960
 DB 910 QYFFDHPESLSLRSTHFPTRGNKTSPPRAHFSVLEFCFDKSNQVPTIDQYASAFEPMNEM 969
 QY 961 ERRLAKEDNVKSYMMQORASPDLSGTGYMKLSPKQYKIPCLEVDVNDIDVQODMLEIL 1020
 DB 970 ERRLAKEDNVKSYMMQORASPDLSGTGYMKLSPKQYKIPCLEVDVNDIDVQODMLEIL 1029
 QY 1021 MTVFSASORIELNLNHSRGFIESIRPALBLSKASVTKCSISKLELSAABQELLLTPLSLE 1080
 DB 1030 MTVFSASORIELNLNHSRGFIESIRPALBLSKASVTKCSISKLELSAABQELLLTPLSLE 1089
 QY 1081 SLEVSGETIOSODIIFPNLDKFLCKLSVLDENINVSIVIPPEFPNFMHMKLLQISA 1140
 DB 1090 SLEVSGETIOSODIIFPNLDKFLCKLSVLDENINVSIVIPPEFPNFMHMKLLQISA 1149
 QY 1141 E 1141
 DB 1150 E 1150

RESULT 6 US-09-493-784-23

; Sequence 23, Application US/09493784
 ; Patent No. 6429011
 ; GENERAL INFORMATION:
 ; APPLICANT: Mackenzie, Alex E.
 ; APPLICANT: Korneluk, Robert G.
 ; APPLICANT: Mahadevan, Mani S.
 ; APPLICANT: McLean, Michael
 ; APPLICANT: Roy, Natalie
 ; APPLICANT: Ikeda, John
 ; TITLE OF INVENTION: Neuronal Apoptosis Inhibitor Protein, Gene Sequence and
 ; Patent No. 6429011
 ; TITLE OF INVENTION: Mutations Causative of Spinal Muscular Atrophy
 ; FILE REFERENCE: 3477-112, 033477/139914
 ; CURRENT APPLICATION NUMBER: US/09/493,784
 ; CURRENT FILING DATE: 2000-01-28
 ; PRIOR APPLICATION NUMBER: 08/836,134
 ; PRIOR FILING DATE: 1997-06-20
 ; NUMBER OF SEQ ID NOS: 23
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 23
 ; LENGTH: 1151
 ; TYPE: PRT
 ; ORGANISM: Homo sapiens
 ; US-09-493-784-23

Query Match 81.5%; Score 5955; DB 4; Length 1151;
 Best Local Similarity 99.8%; Pred. No. 0;
 Matches 1139; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

QY 1 MATOQKASDERISQFDHNLPELSALLGLDAVOLAKELBEEBOKERAKMGKYNQMRSE 60
 DB 10 MATOQKASDERISQFDHNLPELSALLGLDAVOLAKELBEEBOKERAKMGKYNQMRSE 69
 QY AKRLKTFVYIEPYSWIPQEMAAAGFYFTGVKSGIOCFCCSLIFGAGLTRLPIDHKKR 120
 DB AKRLKTFVYIEPYSWIPQEMAAAGFYFTGVKSGIOCFCCSLIFGAGLTRLPIDHKKR 129
 QY 121 HPDCCGLLNKDVGNIAKYDIRVKNLKSRLRGKMRVQEBEARLSPRNMPFYQGISPCV 180
 DB 130 HPDCCGLLNKDVGNIAKYDIRVKNLKSRLRGKMRVQEBEARLSPRNMPFYQGISPCV 189
 QY 181 LBSAGFVFTGKODTVQFCSCGCGCLGNWBEGBDPMKEHAKMPKCEPLRSKXSEBITOYI 240
 DB 190 LBSAGFVFTGKODTVQFCSCGCGCLGNWBEGBDPMKEHAKMPKCEPLRSKXSEBITOYI 249
 QY 241 QSYKGFVDITGEHFVNSWQRELPMASAYCNDISIFAYEELRLDSFQDMPRESAVGAALA 300

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Db      250  QSYKGFVDITGEHFNVSVMQRELPMASAYCNDISIFAEELRLDSFKMPRESAVGAAALAA 309
Qy      301  KAGLFYTSIKDIYOCFSGCGCLEKMOGDDPLDHTCFCFNCPLQNMKSSAETVDLOS 360
Db      310  KAGLFYTSIKDIYOCFSGCGCLEKMOGDDPLDHTCFCFNCPLQNMKSSAETVDLOS 369
Qy      361  RGEICELLETTSESINLEDSIAVGPIVPEMAQGEAOMFOEAKONINEOLRAAYTSAPRHS 420
Db      370  RGEICELLETTSESINLEDSIAVGPIVPEMAQGEAOMFOEAKONINEOLRAAYTSAPRHS 429
Qy      421  LLDSSPLATDHLIGCDLSTASKHISKPYVEPIVLBVGNNLSVMCVGEAGSGKTVLL 480
Db      430  LLDSSPLATDHLIGCDLSTASKHISKPYVEPIVLBVGNNLSVMCVGEAGSGKTVLL 489
Qy      481  KCTAFWASGCCCLLNRFOLVPLYLSSTSTPDEGLASIIICDOLLEKSGSVTECMRNIIQ 540
Db      490  KCTAFWASGCCCLLNRFOLVPLYLSSTSTPDEGLASIIICDOLLEKSGSVTECMRNIIQ 549
Qy      541  QLNKOYLFLLDDYKEICSIPOVYGKLIQNMHLSRTCLLIAVETNRARDIRRYLETILEIK 600
Db      550  QLNKOYLFLLDDYKEICSIPOVYGKLIQNMHLSRTCLLIAVETNRARDIRRYLETILEIK 609
Qy      601  APPFYNTVCLIRKLFESHMTTRLRKPMVYFGKQNSLOKTOKTPLEVAALCAHFOYPPDPS 660
Db      610  APPFYNTVCLIRKLFESHMTTRLRKPMVYFGKQNSLOKTOKTPLEVAALCAHFOYPPDPS 669
Qy      661  PDVAVFKSYMERLSIRNKATAEILKATVSSCGELALGFCSCCFEPNDDLAAGVDED 720
Db      670  PDVAVFKSYMERLSIRNKATAEILKATVSSCGELALGFCSCCFEPNDDLAAGVDED 729
Qy      721  EDLTCWMSKFTAOBLRPYRFLSPAQEPFLAGMLILLDSROEHODLGYHLKQINS 780
Db      730  EDLTCWMSKFTAOBLRPYRFLSPAQEPFLAGMLILLDSROEHODLGYHLKQINS 789
Qy      781  PMMTVSAYNNPLNVYSSLPSTAGPKIVSHLLHVDNKESLENISENDVDYKHQPEISLQ 840
Db      790  PMMTVSAYNNPLNVYSSLPSTAGPKIVSHLLHVDNKESLENISENDVDYKHQPEISLQ 849
Qy      841  MQLRLGLMOCPOAVFVSNSHLLVLAALKTAYQSNNTVAACSPFLYOLQGRITTLGALNT 900
Db      850  MQLRLGLMOCPOAVFVSNSHLLVLAALKTAYQSNNTVAACSPFLYOLQGRITTLGALNT 909
Qy      901  QYFDPHPSLSILSRHPPIRGNKTSPPRAHPSVLETFCDKSOVPTIDODVYASAFEPNMEK 960
Db      910  QYFDPHPSLSILSRHPPIRGNKTSPPRAHPSVLETFCDKSOVPTIDODVYASAFEPNMEK 969
Qy      961  ERNLAEKEDNVKSYMDOQRASPDLSSTGYMQLSPKQYKIPCLEVDVNDIDVVGQDMLIEL 1020
Db      970  ERNLAEKEDNVKSYMDOQRASPDLSSTGYMQLSPKQYKIPCLEVDVNDIDVVGQDMLIEL 1029
Qy      1021  MTFVSASQRIELHNSRGFIESTIRPALFELSKASVTKCSISKLELSAAEOELLITPISLE 1080
Db      1030  MTFVSASQRIELHNSRGFIESTIRPALFELSKASVTKCSISKLELSAAEOELLITPISLE 1089
Qy      1081  SLEVSCTTOSQODQIFPNLDKFLCLKEISVDLEGNINVSFVPEEPNFHMEKLIQISIA 1140
Db      1090  SLEVSCTTOSQODQIFPNLDKFLCLKEISVDLEGNINVSFVPEEPNFHMEKLIQISIA 1149
Qy      1141  E 1141
Db      1150  E 1150

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RESULT 7
US-08-511-485-8
Sequence 8, Application US/08511485
Patent No. 5919912

GENERAL INFORMATION:

APPLICANT: Korneljuk, Robert G.
APPLICANT: Mackenzie, Alexander E.
APPLICANT: Baird, Stephen
TITLE OF INVENTION: MAMMALIAN IAP GENE FAMILY, PRIMERS,

```

/ TITLE OF INVENTION: PROBES, AND DETECTION METHODS
/ NUMBER OF SEQUENCES: 38
/ CORRESPONDENCE ADDRESS:
/ ADDRESSEE: Fish & Richardson P.C.
/ STREET: 225 Franklin Street
/ CITY: Boston
/ STATE: MA
/ COUNTRY: USA
/ ZIP: 02110-2804
/ COMPUTER READABLE FORM:
/ MEDIUM TYPE: Floppy disk
/ COMPUTER: IBM PC compatible
/ OPERATING SYSTEM: PC-DOS/MS-DOS
/ SOFTWARE: Patent Release #1.0, Version #1.30
/ CURRENT APPLICATION DATA:
/ APPLICATION NUMBER: US/08/511,485
/ FILING DATE: 04-AUG-1995
/ CLASSIFICATION: 514
/ ATTORNEY/AGENT INFORMATION:
/ NAME: Clark, Paul T.
/ REGISTRATION NUMBER: 30,162
/ REFERENCE/DOCKET NUMBER: 07540/002001
/ TELECOMMUNICATION INFORMATION:
/ TELEPHONE: 617/542-5070
/ TELEFAX: 617/542-8906
/ TELEX: 200154
/ INFORMATION FOR SEQ ID NO: 8:
/ SEQUENCE CHARACTERISTICS:
/ LENGTH: 618 amino acids
/ TYPE: amino acid
/ STRANDEDNESS: not relevant
/ TOPOLOGY: both
/ MOLECULE TYPE: protein
/ US-08-511-485-8

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Query Match 6.3%; Score 462; DB 2; Length 618;
Best Local Similarity 24.7%; Pred. No. 5.9e-33;

Matches 159; Conservative 93; Mismatches 238; Indels 154; Gaps 24;

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Qy      38  LEEBEQKRAKMOQKGYNSQKSEAKRLKTYTYEPYSSWIP---QEWAAAGFYTGKSG 94
Db      28  LSDWTNSKQMKRDKFCE-----LYRMSTYSTPAGVPEERSILARAGFYTGVDNK 80
Qy      95  IQFCFCSLLIFGALITLPTIEDHKRFHPDCGF---LLNDOVGAIKYDRVKR----- 144
Db      81  VKFCFCGLMDNMLGDSPIQKHKQLYPSCSFIQNLVSAISGSTSKNTSPMRKSPHSHLS 140
Qy      145  -----LKSRL-----RGKRRY--QEEBARLASFRNMPFYVQG 175
Db      141  PLEHSSLFGSYSSLPNPLNRAVEDISSRTNPYSAMSTEARFLTYHMP--LTF 198
Qy      176  ISPCVLSAAGFVFTGKODTVQCFCGCGCIGNNEGGDPKKEAKMPKCEPFRSKKSSEE 235
Db      199  LSPBELARAGFYIIGEDRVACPCGKLSNNEPPKODAMSEHRRHPNCPFL---ENSELE 255
Qy      236  ITQYISYKGFVDITGEHFNVSVMQRELPMASAYCNDISIFAYEELRLDSFKMPRESAVG 295
Db      256  TLRFSIS-----NLSMQT-----HARBMTFMWPSVSVEQ 286
Qy      296  VALAKAGLFYTGIKDIYOCFSGCGCLEKMOGDDPLDHTRCFCFNCPLQNMKSSAETV 355
Db      287  PEQLASAGFYTVGRNDVACFCGCDGRLRCWESGDDPWVEHAKMPFCRFLIRMKQ--EFV 345
Qy      356  PDLQSR-GEICELLETTSESINLEDSIAVGPIVPEMAQGEAOMFOEAKUNLQLAAYTSA 414
Db      346  DEIQRPHLLBQLLSTSDTTGEEN--ADPPIIHGPESS--SEDAVMMNPVVKSALEM 402
Qy      415  SF-----RMSLLDISDL-----ATDHLIGCDLSTAS 442
Db      403  GFNRDILVKQTVLSKILTTGENYKTVNDIVSALLNAEDEKREKQKQAEWAASDLISLR 462
Qy      443  KHISKVQEPVLVPEVFGNL---NSVMCVGEAGSGKTVL---LKTAFWASG----- 490

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Db 463 KNRMAFLFOQLTCLVPLIDNLLKANVINKOEHDIIKQKTQIPLQARELIDTIWKGNAAN 522
Qy 491 -----CCPLNRFOVLVYLSISTR-----PDEGLASIIICQULEK--EGSVTEMCMNII 539
Db 523 IFRKNC--LKEIDSTLYKNLFVDKNMKYIPTEDVSGLSLEQLRLQOEERTCKVCMDKEV 579
Qy 540 QOLKNQVFLDDYKEICSIPOVIGKLIQKNHLSRTCLLAVRT 583
Db 580 -----SVFIPCGHLVVC---QECAPSLRKCPICRGIIKGTVRT 615

RESULT 8
US-09-212-971-8
; Sequence 8, Application US/09212971B
; Patent No. 6107041
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G
; APPLICANT: Mackenzie, Alexander E
; APPLICANT: Liston, Peter
; APPLICANT: Baird, Stephen
; APPLICANT: Teang, Benjamin K
; APPLICANT: Pratt, Christine
; TITLE OF INVENTION: DETECTION AND MODULATION OF IAPS AND
; TITLE OF INVENTION: NAIP FOR THE DIAGNOSIS AND TREATMENT OF PROLIFERATIVE
; FILE REFERENCE: 07891/009002
; CURRENT APPLICATION NUMBER: US/09/212, 971B
; CURRENT FILING DATE: 1998-12-16
; EARLIER APPLICATION NUMBER: 60/017,354
; EARLIER FILING DATE: 1996-04-26
; EARLIER APPLICATION NUMBER: 60/030,590
; EARLIER FILING DATE: 1996-11-14
; EARLIER APPLICATION NUMBER: 08/800,929
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 618
; TYPE: PR1
; ORGANISM: Homo sapiens
; US-09-212-971-8

Query Match 6.3%; Score 462; DB 3; Length 618;
Best Local Similarity 24.7%; Pred. No. 5.9e-33;
Matches 155; Conservative 93; Mismatches 228; Indels 154; Gaps 24;

Qy 38 LEEBEOKERAKMOKGYNQMRSEAKRLKTVTYEPYSSWIP--QENAAAGFYFTGYKSG 94
Db 28 LSWTNSNKKQMKYDFSC-----LYRMSTYSTFPAGVPVSRSLARAGFYTYTGVNDK 80
Qy 95 IOCFCCGLIFGAGLTLPREDHKRFRPDGCF--LANKVGNIAKTDIIVKN----- 144
Db 81 VKFCPCGLMDNWKLGDSPIQKHQOLYPSCSFIQNLVSASLIGSTSKTSPMRNSFAHSLS 140
Qy 145 -----LKSRL-----RCGKRY--QOEBAALASFRMPPFYVOG 175
Db 141 PTLHSLFEGSGYSLSLPNPLNSAIVEDISSRNPISYAMSTEARFLTYHMP--LTF 198
Qy 176 ISPCVLSIAGPVTGKODTVQCFSCGCGCLANWEBGDDPKMEHAKMPKCEFLSKKSSSE 235
Db 199 LSPSELARAGFYIIGPDRAVACFACGCKLSNWBPKDAMSEHRHFNCPFL--ENSLSE 255
Qy 236 ITQYIGYKGFVDTIGSHFNPNWQRLPMASACNDSIAYEELRDSFKDMPRESAVG 255
Db 256 TLRRPIS-----NLISQT-----HAARMRTMYWPSVYVQ 286
Qy 296 VAALAKAGLEFYTGKIDIVQCFSCGCGCLEKMQEGDDPLDTRCPNCPLONMKSAEVT 355
Db 287 PEQLASAGFYIVGNDVYKCFGCGGGLRCHESGDDPWEHAKMPKCEFLIRMKQ--EFV 345
Qy 356 PDIQSR--GELCELLETTSNLSNEDSIAGVPIVPEMAQGEAQMFGKALNLEQLAAVYTS 414
Db 346 DEIQGRYRPHLEQLLSTSDTTEEN--ADPPIIHFGGESS--SDAVMMNTPVVKSALEM 402

Qy 415 SF-----RHMSLIDISDL-----ATDHLGCDLSIAS 442
Db 403 GFRNDLVKQVLSKILTTGENTYTVNDIVSALNADDEKREKEKQAEEMASDDLSLR 462
Qy 443 KHISKPOEPLVPEVFGNL--NSVWCVEGEGSGKTVL--LKKIAFLWASG----- 490
Db 463 KNRMAFLFOQLTCLVPLIDNLLKANVINKOEHDIIKQKTQIPLQARELIDTIWKGNAAN 522
Qy 491 -----CCPLNRFOVLVYLSISTR-----PDEGLASIIICQULEK--EGSVTEMCMNII 539
Db 523 IFRKNC--LKEIDSTLYKNLFVDKNMKYIPTEDVSGLSLEQLRLQOEERTCKVCMDKEV 579
Qy 540 QOLKNQVFLDDYKEICSIPOVIGKLIQKNHLSRTCLLAVRT 583
Db 580 -----SVFIPCGHLVVC---QECAPSLRKCPICRGIIKGTVRT 615

RESULT 9
US-08-800-929A-8
; Sequence 8, Application US/08800929A
; Patent No. 6133437
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G
; APPLICANT: Mackenzie, Alexander E
; APPLICANT: Liston, Peter
; APPLICANT: Baird, Stephen
; APPLICANT: Teang, Benjamin K
; APPLICANT: Pratt, Christine
; TITLE OF INVENTION: DETECTION AND MODULATION OF
; TITLE OF INVENTION: IAPS AND NAIP FOR THE DIAGNOSIS AND TREATMENT OF PROLIFERATIVE
; NUMBER OF SEQUENCES: 17
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Clark & Elbing LLP
; STREET: 176 Federal Street
; CITY: Boston
; STATE: MA
; COUNTRY: USA
; ZIP: 02110
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FASTSEQ for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/800,929A
; FILING DATE: 13-FEB-1997
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/030,590
; FILING DATE: 14-NOV-1996
; APPLICATION NUMBER: 60/017,354
; FILING DATE: 26-APR-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: Bieker-Brady, Kristina
; REGISTRATION NUMBER:
; REFERENCE/DOCKET NUMBER: 07891/009001
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-428-0200
; TELEFAX: 617-428-7045
; TELEX:
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 618 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; US-08-800-929A-8

Query Match 6.3%; Score 462; DB 3; Length 618;
Best Local Similarity 24.7%; Pred. No. 5.9e-33;


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; TITLE OF INVENTION: DISEASE
; FILE REFERENCE: 07891/009003
; CURRENT APPLICATION NUMBER: US/09/617,053A
; CURRENT FILING DATE: 2000-07-14
; PRIOR APPLICATION NUMBER: US 08/800,929
; PRIOR FILING DATE: 1997-02-13
; NUMBER OF SEQ ID NOS: 17
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 618
; TYPE: PRF
; ORGANISM: Homo sapiens
; US-09-617-053A-8

Query Match      6.3%; Score 462; DB 3; Length 618;
Best Local Similarity 24.7%; Pred. No. 5,9e-33;
Matches 155; Conservative 93; Mismatches 238; Indels 154; Gaps 24;

QY 38 LEEBEQKERAKQKGNQSRSEAKRLKTFVTEPYSSWIP---QEMAAAGFYFTGVKSG 94
DB 28 LSDWTNNKQKMKYDFSCF-----LYRMSTYSTPAGVPVSEBSLARAAGFYTTGVNDK 80
QY 95 IQCFCCSLILFGAGLTRLPIDHKKRPHDCCF---LANKDVGNIAKYDIRVKN----- 144
DB 81 VKFCFCGLMDNWKLDSDSPIQKHKQLYPSCSFIGNLVASLGSSTKSTSPMRNSFAHSL 140
QY 145 -----LKSRL-----RGKKRY---QEEBARLASFRMWPFTVVG 175
DB 141 PTEHSSLSPGSGYSLSPPNPLNSRAVEDISSRTNPYSYAMSTEARFLTYHWP--LTF 198
QY 176 ISPCVLSSEAGFVFTGKODTVQCFSCGCGCLGNWEGDDPMKEHAKWPKCEFLRSKSSSE 235
DB 199 LSPSELARAGFYIYGDRVACFACGCGKLSNWEPKDAMSEHRRHFNCPFL--ENSL 255
QY 236 ITGYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSTFAVELRLDSFKDWPRESAVG 295
DB 256 TLRFSIS-----NLSTQ-----HAARMRTFMWPPSSVPVQ 286
QY 296 VALAAYAGLFYTGIDKIVQCFSCGCGCLEKMOEGDDPLDHTRCFPCNPFLONNKSSAEVT 355
DB 287 PEOLASAGFYVGRNDVCFCCGGLRCWESGDDPWVEHAKWPRCEFLIRMKGC-EFV 345
QY 356 PDLQSR-GEICELLETTSBNSLSDSIKAVGPIVEMAGQEAQWFOEAKNINXOLRAAYTSA 414
DB 346 DEIQGRPHLEQLSTSDTTGSEN--ADPPIIHFGEGSS--SEDAVMNMTPVVKALEM 402
QY 415 SFL-----RHMSLIDISSDL-----ATDHLGCDLSIAS 442
DB 403 GFNRDLVKQTVLSKILTTGENYKTVNDIVSALLNAEDEKEKEKEKQAEEMASDLSILR 462
QY 443 KHSKRPQOEVLVPEVNGN---NSVMCVGEAGSGCTVL---LKTIALMASG----- 490
DB 463 KHMMAFLQQLTCLVPLIDNLLKANVINKQEHDIKQTOIPLQARELIDITWKGNAAN 522
QY 491 -----CCPLNRFQVLVFLSLSTR-----PDEGLASIIDQLLEK--EGSVTEKMNII 539
DB 523 IFRKQ---LKEIDSTLYKNLFVDKMKYIPTEDVSGSLSEQLRLDSEKTCVCHDKEY 579
QY 540 QOLKNQVFLLDYKEICSIPOVIGKLIQKNLSRTCLLIAVNT 583
DB 580 -----SVFIFPCGHLVVC---QECAPSLRKCPICRGIIKGTVRT 615

RESULT 12
US-09-069-023-29
; Sequence 29, Application US/09069023A
; Patent No. 6348573
; GENERAL INFORMATION:
; APPLICANT: Nunez, Gabriel
; APPLICANT: Inohara, Naohito
; APPLICANT: Koseki, Takeyoshi
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR IDENTIFYING APOPTOSIS
; TITLE OF INVENTION: SIGNALING PATHWAY INHIBITORS AND ACTIVATORS
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; FILE REFERENCE: UM-0333
; CURRENT APPLICATION NUMBER: US/09/069,023A
; CURRENT FILING DATE: 1998-04-27
; NUMBER OF SEQ ID NOS: 38
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 29
; LENGTH: 618
; TYPE: PRF
; ORGANISM: Homo sapiens
; US-09-069-023-29

Query Match      6.3%; Score 462; DB 3; Length 618;
Best Local Similarity 26.0%; Pred. No. 5,9e-33;
Matches 155; Conservative 82; Mismatches 214; Indels 146; Gaps 22;

QY 38 LEEBEQKERAKQKGNQSRSEAKRLKTFVTEPYSSWIP---QEMAAAGFYFTGVKSG 94
DB 28 LSDWTNNKQKMKYDFSCF-----LYRMSTYSTPAGVPVSEBSLARAAGFYTTGVNDK 80
QY 95 IQCFCCSLILFGAGLTRLPIDHKKRPHDCCF---LANKDVGNIAKYDIRVKN----- 144
DB 81 VKFCFCGLMDNWKLDSDSPIQKHKQLYPSCSFIGNLVASLGSSTKSTSPMRNSFAHSL 140
QY 145 -----LKSRL-----RGKKRY---QEEBARLASFRMWPFTVVG 175
DB 141 PTEHSSLSPGSGYSLSPPNPLNSRAVEDISSRTNPYSYAMSTEARFLTYHWP--LTF 198
QY 176 ISPCVLSSEAGFVFTGKODTVQCFSCGCGCLGNWEGDDPMKEHAKWPKCEFLRSKSSSE 235
DB 199 LSPSELARAGFYIYGDRVACFACGCGKLSNWEPKDAMSEHRRHFNCPFL--ENSL 255
QY 236 ITGYIQSYKGFVDITGEHFVNSWVQRELPMASAYCNDSTFAVELRLDSFKDWPRESAVG 295
DB 256 TLRFSIS-----NLSTQ-----HAARMRTFMWPPSSVPVQ 286
QY 296 VALAAYAGLFYTGIDKIVQCFSCGCGCLEKMOEGDDPLDHTRCFPCNPFLONNKSSAEVT 355
DB 287 PEOLASAGFYVGRNDVCFCCGGLRCWESGDDPWVEHAKWPRCEFLIRMKGC-EFV 345
QY 356 PDLQSR-GEICELLETTSBNSLSDSIKAVGPIVEMAGQEAQWFOEAKNINXOLRAAYTSA 414
DB 346 DEIQGRPHLEQLSTSDTTGSEN--ADPPIIHFGEGSS--SEDAVMNMTPVVKALEM 402
QY 415 SFLMSLIDISSDLATDHLGCDLSIASKHSKRPQOE--LVLPVNGNLSVMCVGEAG 473
DB 403 GFNR-----DL-----VKQTVSKILTTGENYKTVNDIVSALLNAE 498
QY 474 SGTVLK-KIAFLMAGCCPLNRFQVLVFLSLSTRPDEGLASIIDQLLEKSGSVTE 532
DB 439 DEKREBEKEQAEEMASDLSILRKRMALFQQLTCLV-----ILDVLK----- 484
QY 533 MCMRNIIQOLKNQVFLLDYKEICSIPOVIGKLIQKNLSRTCLLIAVNTNARDI 589
DB 485 ---ANVINKQEHDI-----KQTOIPLQARELID-----TLYVGNAANI 523

RESULT 13
US-09-201-936-8
; Sequence 8, Application US/09201936
; Patent No. 6541457
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G.
; APPLICANT: Mackenzie, Alexander E.
; APPLICANT: Baird, Stephen
; APPLICANT: Liston, Peter
; TITLE OF INVENTION: MAMMALIAN IAP GENE FAMILY, PRIMERS,
; TITLE OF INVENTION: PROBES, AND DETECTION METHODS
; FILE REFERENCE: 07891/003003
; CURRENT APPLICATION NUMBER: US/09/201,936
; CURRENT FILING DATE: 1998-12-01
; EARLIER APPLICATION NUMBER: 09/011,356
; EARLIER FILING DATE: 1998-02-04
; EARLIER APPLICATION NUMBER: PCT/IB96/01022
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; EARLIER FILING DATE: 1996-08-05
; EARLIER APPLICATION NUMBER: 08/576,956
; EARLIER FILING DATE: 1995-12-22
; EARLIER APPLICATION NUMBER: 08/511,485
; EARLIER FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 618
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-201-936-8

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Query Match      6.3%; Score 462; DB 4; Length 618;
Best Local Similarity 24.7%; Pred. No. 5.9e-33;
Matches 159; Conservative 93; Mismatches 238; Indels 154; Gaps 24;

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QY 38 LEEBQKERAKQKQKNSQMRSEAKRLKTFVYEPYSSWIP---QEMAAAGFTYGVKSG 94
DB 28 LSDWTNSNKKQKMKYDFSC-----LYRMYSTPACVPVSEKSLARAGFYTGVDK 80
QY 95 IOCFCCSLIFGAGLTRLPEDHKRPHDQGF---LANKVGNIAKYDIRVN----- 144
DB 81 VKFCFCGLMDNMKLDSPLOKHQKQLYPSCSFQNLVSAISLSTSKTSPMRNSFAHSLS 140
QY 145 -----LKSRL-----RGKMKRY--QEEEARLASFRNMPFYVVG 175
DB 141 PTLHESSLFSGSYSLPNNPLNRAVEDISSRTNPTYSAMSTEARFLTYHWP--LTF 198
QY 176 ISPCVLSAAGFYFTGKODTVQCFSCGCLGNWEEGDDPMKEHAKMFKPCFPLRSKSSSE 235
DB 199 LSPSEIARAGFYIYGDRVACFACGCKLSNMEPDDAMSEHRRHPNCPFL---ENSLE 255
QY 236 ITQYIQSYKGFVDITGEHFNVSQVRELPMASAYCNDSTIFAYELRLDSFKDMPRESAVG 295
DB 256 TLRFSIS-----NLSMQT-----HAAMRTMYTPSSVPVQ 286
QY 296 VVALAKAGLFTYGTIKDIYQCFSCGCLGKQWEGDDPLDHTRCFPCPLQNMKSSAEVT 355
DB 287 PQLASAGFYVGRNDVACFCGCDGLRCWESGDDPMWEHAKMFKPCFPLIRKQO-EFV 345
QY 356 PDIQSR-GEICELLETTSSENLDSIAVGPVPEMAQGEAOMFOEAKNLEOLRAAYTSA 414
DB 346 DEIQRYPHLLQQLSTSDTTGEEN--ADPPIIHFGPGESS--SEDAVMNTTPVVKSALEM 402
QY 415 SF-----RHMSLIDISSDL-----ATDHLGCDLSIAS 442
DB 403 GFRNDLVKQTVLSKILTTGENYKTVDIVSALINAEDEKREKEKQAEEMASDLSLR 462
QY 443 KHISKEVQEPVLPBEVFGNL--NSVMCEGEAGSGKTVL---LKKIAFLMASG----- 490
DB 463 KRMALFOQLTCVLPILNDLKNANVINKQEHDIKQKQIPLQARLIDITIVKGAAN 522
QY 491 -----CCPLNRFOLVFYLISSTR-----PDEGLASIIDQULEK--EGSVTEMCRNII 539
DB 523 IFRNC---LKEIDSTLYKMLFVDKMKXYIPTBEDVSGLSLEBQLRRLQEBERTCKVCMDKEY 579
QY 540 QQLKNOVFLDLDYKEICSPQVIGKLIQKNHLSRTCLLIAVRT 583
DB 580 -----SVVFIPCGHLVVC---QECAPSLRKCPICRGIIGKTVRT 615

RESULT 14
US-09-011-356-8
; Sequence 8, Application US/09011356A
; Patent No. 6656704
; GENERAL INFORMATION:
; APPLICANT: Korneiluk, Robert G.
; APPLICANT: Mackenzie, Alexander E.
; APPLICANT: Baird, Stephen
; APPLICANT: Liston, Peter
; TITLE OF INVENTION: MAMMALIAN IAP GENE FAMILY, PRIMERS,
; TITLE OF INVENTION: PROBES, AND DETECTION METHODS

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; FILE REFERENCE: 07891/003002
; CURRENT APPLICATION NUMBER: US/09/011,356A
; CURRENT FILING DATE: 1998-09-14
; EARLIER APPLICATION NUMBER: PCT/IB96/01022
; EARLIER FILING DATE: 1996-08-05
; EARLIER APPLICATION NUMBER: 08/576,956
; EARLIER FILING DATE: 1995-12-22
; EARLIER APPLICATION NUMBER: 08/511,485
; EARLIER FILING DATE: 1995-08-04
; NUMBER OF SEQ ID NOS: 45
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 618
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-011-356-8

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Query Match      6.3%; Score 462; DB 4; Length 618;
Best Local Similarity 24.7%; Pred. No. 5.9e-33;
Matches 159; Conservative 93; Mismatches 238; Indels 154; Gaps 24;

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QY 38 LEEBQKERAKQKQKNSQMRSEAKRLKTFVYEPYSSWIP---QEMAAAGFTYGVKSG 94
DB 28 LSDWTNSNKKQKMKYDFSC-----LYRMYSTPACVPVSEKSLARAGFYTGVDK 80
QY 95 IOCFCCSLIFGAGLTRLPEDHKRPHDQGF---LANKVGNIAKYDIRVN----- 144
DB 81 VKFCFCGLMDNMKLDSPLOKHQKQLYPSCSFQNLVSAISLSTSKTSPMRNSFAHSLS 140
QY 145 -----LKSRL-----RGKMKRY--QEEEARLASFRNMPFYVVG 175
DB 141 PTLHESSLFSGSYSLPNNPLNRAVEDISSRTNPTYSAMSTEARFLTYHWP--LTF 198
QY 176 ISPCVLSAAGFYFTGKODTVQCFSCGCLGNWEEGDDPMKEHAKMFKPCFPLRSKSSSE 235
DB 199 LSPSEIARAGFYIYGDRVACFACGCKLSNMEPDDAMSEHRRHPNCPFL---ENSLE 255
QY 236 ITQYIQSYKGFVDITGEHFNVSQVRELPMASAYCNDSTIFAYELRLDSFKDMPRESAVG 295
DB 256 TLRFSIS-----NLSMQT-----HAAMRTMYTPSSVPVQ 286
QY 296 VVALAKAGLFTYGTIKDIYQCFSCGCLGKQWEGDDPLDHTRCFPCPLQNMKSSAEVT 355
DB 287 PQLASAGFYVGRNDVACFCGCDGLRCWESGDDPMWEHAKMFKPCFPLIRKQO-EFV 345
QY 356 PDIQSR-GEICELLETTSSENLDSIAVGPVPEMAQGEAOMFOEAKNLEOLRAAYTSA 414
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QY 415 SF-----RHMSLIDISSDL-----ATDHLGCDLSIAS 442
DB 403 GFRNDLVKQTVLSKILTTGENYKTVDIVSALINAEDEKREKEKQAEEMASDLSLR 462
QY 443 KHISKEVQEPVLPBEVFGNL--NSVMCEGEAGSGKTVL---LKKIAFLMASG----- 490
DB 463 KRMALFOQLTCVLPILNDLKNANVINKQEHDIKQKQIPLQARLIDITIVKGAAN 522
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DB 523 IFRNC---LKEIDSTLYKMLFVDKMKXYIPTBEDVSGLSLEBQLRRLQEBERTCKVCMDKEY 579
QY 540 QQLKNOVFLDLDYKEICSPQVIGKLIQKNHLSRTCLLIAVRT 583
DB 580 -----SVVFIPCGHLVVC---QECAPSLRKCPICRGIIGKTVRT 615

RESULT 15
US-09-672-717-223
; Sequence 223, Application US/09672717
; Patent No. 6673917
; GENERAL INFORMATION:
; APPLICANT: Korneiluk, Robert G.
; APPLICANT: LaCasse, Eric

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/ APPLICANT: Baird, Stephen
/ APPLICANT: Holcik, Martin
/ APPLICANT: Young, Sean
/ TITLE OF INVENTION: Antisense IAP Nucleic Acids and Uses
/ TITLE OF INVENTION: Thereof
/ FILE REFERENCE: 07891/025001
/ CURRENT APPLICATION NUMBER: US/09/672,717
/ CURRENT FILING DATE: 2000-09-28
/ NUMBER OF SEQ ID NOS: 231
/ SOFTWARE: PaedSeq for Windows Version 4.0
/ SEQ ID NO 223
/ LENGTH: 618
/ TYPE: PRT
/ ORGANISM: Homo sapiens
US-09-672-717-223

Query Match      6.3%; Score 462; DB 4; Length 618;
Best Local Similarity 24.7%; Pred. No. 5.9e-33;
Matches 159; Conservative 93; Mismatches 238; Indels 154; Gaps 24;

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DB 28 LSDWTNSNMKQKMYDPSCE-----LYRMTYSTPAGVPVSEKSLARAGFYTGVDK 80
QY 95 IOCCSCSLIFGAGLTRPIEDHKRPHDCCF---LLNKDVGNIAKYDIRKN----- 144
DB 81 VKFCGCGMLDMNKLGDSPLOKHKOLYPSCFTQNLVSASLGSTSKTSMRNSPAHSLS 140
QY 145 -----LKSRL-----RGKKRY--QEEEARLASFRNWPYVOG 175
DB 141 PTLHSSLSFGSYSLPPNPLNSRAVEDISSRTNPFYSYAMSTEARFLTYHWP--LTF 198
QY 176 ISPCVSEAGFVVTGKODTYQCFSCCGCLNMEEGDDPMKEHAKMFKCFILSKSSSE 235
DB 199 LSPSELARAGFYIIGDRVACPCGKLSNMBPKDAMSEHRHHPNCFPL--ENSLE 255
QY 236 ITGYIOSYKGFVDITGEHFNYSWVORELPMASAYCNDISIAYEELRLDSFKDWPRESAVG 295
DB 256 TLRFPSIS-----NLSMQT-----HAARMTIMYPPSSVPVQ 286
QY 296 VAALAKAGLFYTGSIKDIVOCFSCGCLKMQEGDDPLDHTRCFPNCFLONMKSSAEVT 355
DB 287 PEQLASAGFYVGRNDVCKFCGCDGLRCWESGDDPMVEHAKWFPCEFLIRMKQ-EPV 345
QY 356 PDIQSR-GEICELLETTSBSNLEDSIAGVPIVPMAGQEQFOEAKNLNEQLRAAYTSA 414
DB 346 DEIQRYPHLLBQLLSTSDTTGSEN--ADPPIIHFGPGESS--SEDAVMNTPVVKSALEM 402
QY 415 SF-----RHMSLIDISSDL-----ATDHLGCDLSIAS 442
DB 403 GPNRDLVKQTVLSKILTTGENYKTVDIVSALNAEDEKREKEKQAEEMASDDLSLR 462
QY 443 KHISKVQEBPLVPEVFGNL---NSVWCVEGASGKTVL---LKKIAFLMASG----- 490
DB 463 KXNMALFQQLCTVLPILDNILKANVINKEHDIIKQKTOIPLQARELIDTIWKGNAAN 522
QY 491 -----CCEPLNRFOLVFPLSLSTR-----PDEGLASITCDQLLEK--EGSVTEMKRNIT 539
DB 523 IFKNC--LKEIDSTLYKNLFVDKNMKYIPTBEDVSGLSLEBQLRLOEERTCYCMDKEV 579
QY 540 QQLKNQVLPFLDDYKEICSIPOYIGKLIQKNHLSRTCLLIAVRT 583
DB 580 -----SVVFIPCGHLVVC---QECAPSLKCKPICGIIKGTVRT 615
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Search completed: March 25, 2005, 06:41:35
Job time : 52 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM protein - protein search, using SW model

Run on: March 25, 2005, 06:40:39 ; Search time 1249 Seconds
(without alignments)
371.925 Million cell updates/sec

Title: US-09-830-338-1

Perfect score: 7308

Sequence: 1 MATOQKASBERISQFDHNL.....SKYLITLQKILPFSPIIK 1403

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 1407402 seqs, 331100923 residues

1407402

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

Published Applications AA:*
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Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	7308	100.0	1403	8 US-08-913-322-22	Sequence 22, App1
2	7308	100.0	1403	8 US-08-913-322-24	Sequence 24, App1
3	7308	100.0	1403	14 US-10-285-408-1	Sequence 1, App1
4	3970.5	54.3	782	9 US-09-841-739-9	Sequence 9, App1
5	3970.5	54.3	782	14 US-10-449-315-9	Sequence 9, App1
6	1975	27.0	385	14 US-10-029-386-33707	Sequence 33707, A
7	1903	26.0	898	9 US-09-841-739-11	Sequence 11, App1
8	1903	26.0	898	14 US-10-449-315-11	Sequence 11, App1
9	1037	14.2	203	14 US-10-029-386-33933	Sequence 33933, A
10	661	9.0	1204	4 US-09-841-739-5	Sequence 5, App1
11	661	9.0	1204	14 US-10-449-315-5	Sequence 5, App1
12	654	8.9	1024	14 US-10-156-733-2	Sequence 2, App1
13	654	8.9	1070	14 US-10-221-097-49	Sequence 49, App1

14	653	8.9	1024	9 US-09-841-739-2	Sequence 2, App1
15	653	8.9	1024	14 US-10-449-315-2	Sequence 2, App1
16	641	8.8	1024	4 US-09-864-921-97	Sequence 97, App1
17	641	8.8	1024	17 US-10-766-682-97	Sequence 97, App1
18	545.5	7.5	118	9 US-09-925-299-1033	Sequence 1033, App
19	545.5	7.5	118	10 US-09-925-299-1033	Sequence 48, App1
20	536.5	7.3	738	14 US-10-221-097-48	Sequence 8, App1
21	462	6.3	618	9 US-09-974-592-8	Sequence 8, App1
22	462	6.3	618	9 US-09-201-936-8	Sequence 338, App
23	462	6.3	618	14 US-10-153-668-338	Sequence 200, App
24	462	6.3	618	14 US-10-207-655-200	Sequence 2, App1
25	462	6.3	618	14 US-10-232-286-2	Sequence 4, App1
26	462	6.3	618	14 US-10-366-307-4	Sequence 3, App1
27	462	6.3	618	15 US-10-361-270-3	Sequence 63, App1
28	462	6.3	618	15 US-10-260-708-63	Sequence 223, App
29	462	6.3	618	16 US-10-636-065-223	Sequence 8, App1
30	462	6.3	618	16 US-10-600-272-8	Sequence 78, App1
31	462	6.3	618	16 US-10-730-476A-78	Sequence 2, App1
32	462	6.3	618	17 US-09-934-717-2	Sequence 14, App1
33	457.5	6.3	612	14 US-10-934-717-14	Sequence 14, App1
34	457.5	6.3	612	17 US-10-232-286-14	Sequence 42, App1
35	457.5	6.3	612	17 US-10-934-717-14	Sequence 229, App
36	441.5	6.0	591	9 US-09-201-936-42	Sequence 42, App1
37	441.5	6.0	591	16 US-10-636-065-229	Sequence 12, App1
38	441.5	6.0	591	16 US-10-600-272-42	Sequence 10, App1
39	440	6.0	600	9 US-09-974-592-12	Sequence 10, App1
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41	437.5	6.0	496	9 US-09-201-936-10	Sequence 225, App
42	437.5	6.0	496	16 US-10-636-065-225	Sequence 10, App1
43	437.5	6.0	496	16 US-10-600-272-10	Sequence 4, App1
44	436.5	6.0	604	14 US-10-232-286-4	Sequence 6, App1
45	436.5	6.0	604	14 US-10-141-618-6	Sequence 6, App1

ALIGNMENTS

RESULT 1
US-08-913-322-22
? Sequence 22, Application US/08913322
? Publication No. US20020137028A1
? GENERAL INFORMATION:
? APPLICANT: Kornelk, Robert G.
? APPLICANT: MacKenzie, Alexander E.
? APPLICANT: Roy, Natalie
? APPLICANT: Robertson, George
? APPLICANT: Tamai, Katsu
? TITLE OF INVENTION: USER OF NEURONAL APOPTOSIS INHIBITOR
? FILE REFERENCE: 07891/013001
? CURRENT APPLICATION NUMBER: US/08/913,322
? CURRENT FILING DATE: 1997-09-12
? EARLIER APPLICATION NUMBER: PCT/IB97/00142
? EARLIER FILING DATE: 1997-01-17
? EARLIER APPLICATION NUMBER: GB 9601108.5
? EARLIER FILING DATE: 1996-01-19
? NUMBER OF SEQ ID NOS: 27
? SOFTWARE: FastSeq for Windows Version 3.0
? SEQ ID NO 22
? LENGTH: 1403
? TYPE: PRT
? ORGANISM: Homo sapiens
? US-08-913-322-22
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Best local similarity 100.0%; Pred. No. 0;
Matches 1403; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy AKRLKFVTEPYEPSSWIPQMAAGFYFTGVKSGIOCFCCSLILFGAGLTRLPIDHKRF 120

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Qy      601 APPEYTVTCILRLKLSHNMTRLRKRMVYFGKNSLOKIOCTPLFYAICAMFOYPRDS 660
Db      601 APPEYTVTCILRLKLSHNMTRLRKRMVYFGKNSLOKIOCTPLFYAICAMFOYPRDS 660
Qy      661 FDDVAVFKSYMERLSLRNKATARIKATVSSCGELMKGFFSCCFERNDDDLAEAGVDE 720
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Qy      721 EDLTMLCMSFTYQORLRPFYRFLSPAFQEBLAGRLIELDSDROEODGLGHLKQINS 780
Db      721 EDLTMLCMSFTYQORLRPFYRFLSPAFQEBLAGRLIELDSDROEODGLGHLKQINS 780
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Db      841 MOLLRLGIMQICPAYFSMVSEHLLVLALKTAYOSNTVAACSPVLOFLOGRTLLGALNL 900
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Qy      961 ERNLAKEDNVKSYMOMORRASPDLSTGYWKLSPKOYKIPCLEVDVNDIDVYGOMDLLEL 1020
Db      961 ERNLAKEDNVKSYMOMORRASPDLSTGYWKLSPKOYKIPCLEVDVNDIDVYGOMDLLEL 1020
Qy      1021 MTFVFSASQRIELHLNRSRGFIESIRPALELSKASVTKCSISKLELSAAQOELLTLPSLE 1080
Db      1021 MTFVFSASQRIELHLNRSRGFIESIRPALELSKASVTKCSISKLELSAAQOELLTLPSLE 1080
Qy      1081 SLEVSGTISODOIIFNLDKYFLCLKBLASVDLBSGNINVSFVIBPEFNFHMEKLIQISA 1140
Db      1081 SLEVSGTISODOIIFNLDKYFLCLKBLASVDLBSGNINVSFVIBPEFNFHMEKLIQISA 1140
Qy      1141 EYDPSKLVKLIONSPLVHFLKCNFFSDFGSLMTLVSCKLTLEIKFSDFEQAVPFA 1200

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Db      1141 EYDPSKLVKLIONSPLVHFLKCNFFSDFGSLMTLVSCKLTLEIKFSDFEQAVPFA 1200
Qy      1201 SLNPFISLKLINLEGOFPDEETSEKFAVILGSLNLEELIIPTEGIVVALLIIQOCO 1260
Db      1201 SLNPFISLKLINLEGOFPDEETSEKFAVILGSLNLEELIIPTEGIVVALLIIQOCO 1260
Qy      1261 QLNHLVLSFPTKLTNDSDVVEIAKVAISSGFOQLKJENLKLSINHKTITEGYRNFQALDNM 1320
Db      1261 QLNHLVLSFPTKLTNDSDVVEIAKVAISSGFOQLKJENLKLSINHKTITEGYRNFQALDNM 1320
Qy      1321 PNLQELDISRHFTECKIAQATVTKSSQCVLRPLRLINMLSWLLDADDIALLNMKER 1380
Db      1321 PNLQELDISRHFTECKIAQATVTKSSQCVLRPLRLINMLSWLLDADDIALLNMKER 1380
Qy      1381 HPOSKYLTLLOKWLIPFSPILOK 1403
Db      1381 HPOSKYLTLLOKWLIPFSPILOK 1403

RESULT 2
US-08-913-322-24
; Sequence 24, Application US/08913322
; Publication NO. US20020137028A1
; GENERAL INFORMATION:
; APPLICANT: Korneljuk, Robert G.
; APPLICANT: Mackenzie, Alexander E.
; APPLICANT: Roy, Natalie
; APPLICANT: Robertson, George
; APPLICANT: Tamai, Katsu
; TITLE OF INVENTION: USER OF NEURONAL APOPTOSIS INHIBITOR
; FILE REFERENCE: (N/AIP)
; FILE REFERENCE: 07891/013001
; CURRENT FILING DATE: 1997-09-12
; EARLIER FILING DATE: 1997-01-17
; EARLIER APPLICATION NUMBER: PCT/IB97/00142
; EARLIER FILING DATE: 1997-01-17
; EARLIER APPLICATION NUMBER: GB 9601108.5
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 24
; LENGTH: 1403
; TYPE: PRT
; ORGANISM: Homo sapiens
US-08-913-322-24

Query Match      100.0%; Score 7308; DB 8; Length 1403;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1403; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 361 RGELELLETTSSNLEDSIAVGPVPEMAQGEAOWFOEAKNINEOLRAAYTSASFRHMS 420
DB 361 RGELELLETTSSNLEDSIAVGPVPEMAQGEAOWFOEAKNINEOLRAAYTSASFRHMS 420
QY 421 LLDISSDLATDHLGGCDLSIASGHISKPVEPLVLPVEFGNLSVNCVEGEASGKTVL 480
DB 421 LLDISSDLATDHLGGCDLSIASGHISKPVEPLVLPVEFGNLSVNCVEGEASGKTVL 480
QY 481 KKIAPFAMASGCCPLNRFOLVFYLSSSTRPDGLASIIDOLLEKGSVTECMRNIIQ 540
DB 481 KKIAPFAMASGCCPLNRFOLVFYLSSSTRPDGLASIIDOLLEKGSVTECMRNIIQ 540
QY 541 QLNQOVLFLDDYKEICSIPOVIGKLIQKNHLSRTCLLIAVTRNRADIRRYLETTLEIK 600
DB 541 QLNQOVLFLDDYKEICSIPOVIGKLIQKNHLSRTCLLIAVTRNRADIRRYLETTLEIK 600
QY 601 APFFYNTVCILRLKLFSHNMTLRKFMVYFGKNSLOKIQKTPLFVAICAHMFQYPPDP 660
DB 601 APFFYNTVCILRLKLFSHNMTLRKFMVYFGKNSLOKIQKTPLFVAICAHMFQYPPDP 660
QY 661 FDDVAVFKSYMERLSLRNKATAIILKATVSSCGELALKGFFSCCFEPPNDDLAAGVDE 720
DB 661 FDDVAVFKSYMERLSLRNKATAIILKATVSSCGELALKGFFSCCFEPPNDDLAAGVDE 720
QY 721 EDLTWCLMSKFTQRLRPFRFLSPAFOEFLAGMRILIELDSDROEHODLGYHLKOINS 780
DB 721 EDLTWCLMSKFTQRLRPFRFLSPAFOEFLAGMRILIELDSDROEHODLGYHLKOINS 780
QY 781 PMWTAVAYNNFLNVYSLPSTKAGPKIVSHLHLVDNKESELENI SENDYLKHPETISIQ 840
DB 781 PMWTAVAYNNFLNVYSLPSTKAGPKIVSHLHLVDNKESELENI SENDYLKHPETISIQ 840
QY 841 MOLLRLGMOJCPOAYFSMVSEHLLVLAALKTAQOSNTVAAASPFVLQFLQRTITLGLNL 900
DB 841 MOLLRLGMOJCPOAYFSMVSEHLLVLAALKTAQOSNTVAAASPFVLQFLQRTITLGLNL 900
QY 901 QYFFDPRESLSLRSIHFPRIKGNKTPSPRAHFSVLETGFCDSQVPTIDODVASAFAEPNEM 960
DB 901 QYFFDPRESLSLRSIHFPRIKGNKTPSPRAHFSVLETGFCDSQVPTIDODVASAFAEPNEM 960
QY 961 ERNLAEKEDNVKSYMOMORASPDLSGTWYKLSPKOYKIPCLEVDVNDIDVGOQMLEIL 1020
DB 961 ERNLAEKEDNVKSYMOMORASPDLSGTWYKLSPKOYKIPCLEVDVNDIDVGOQMLEIL 1020
QY 1021 MTFVFSASORIELHLNHSRGFIESIRPALLESKASVTKCSISKLELSAEJELLLTPSLR 1080
DB 1021 MTFVFSASORIELHLNHSRGFIESIRPALLESKASVTKCSISKLELSAEJELLLTPSLR 1080
QY 1081 SLEVSGETIOSQODIPNLDFCLCKELSVLDEGNINVSFVPEEPFPHHMEKLLIQISA 1140
DB 1081 SLEVSGETIOSQODIPNLDFCLCKELSVLDEGNINVSFVPEEPFPHHMEKLLIQISA 1140
QY 1141 EYDPSKLVKLKIONSPNLHVLHLCNPFSDGSLMTMLVSCCKLLEIKFSDSPFOAVPVA 1200
DB 1141 EYDPSKLVKLKIONSPNLHVLHLCNPFSDGSLMTMLVSCCKLLEIKFSDSPFOAVPVA 1200
QY 1201 SLEPNFISLKLINLEGOQFPDEBETSEKFAVILGSLSNLEBELILPTGOGIYVAVAKLIIOCCQ 1260
DB 1201 SLEPNFISLKLINLEGOQFPDEBETSEKFAVILGSLSNLEBELILPTGOGIYVAVAKLIIOCCQ 1260
QY 1261 QLHGCVLVSPFKTLNDSVVEIKVAISGGFOKLEMLKLSINHKITEGEGYRNFOLDNM 1320
DB 1261 QLHGCVLVSPFKTLNDSVVEIKVAISGGFOKLEMLKLSINHKITEGEGYRNFOLDNM 1320
QY 1321 PNLQELDISRHFTTECIKAQATTVKSLSQCVLRLPRLIRLNLMSLLDADIDALLNWKER 1380
DB 1321 PNLQELDISRHFTTECIKAQATTVKSLSQCVLRLPRLIRLNLMSLLDADIDALLNWKER 1380
QY 1381 HPOSXYLTIIQKWLPPSPITOK 1403
DB 1381 HPOSXYLTIIQKWLPPSPITOK 1403

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RESULT 3
US-10-285-408-1
; Sequence 1, Application US/10285408
; Publication No. US20030108967A1
; GENERAL INFORMATION:
; APPLICANT: IKEDA, Joho
; APPLICANT: SAKAI, Harumi
; TITLE OF INVENTION: Monoclonal Antibodies Against Human Apoptosis Inhibitory Protein
; TITLE OF INVENTION: and Method For Assaying the NAIP
; FILE REFERENCE: 2002-1440/WMC/00653
; CURRENT APPLICATION NUMBER: US/10/285, 408
; PRIOR FILING DATE: 2002-11-01
; PRIOR APPLICATION NUMBER: 09/830, 338
; PRIOR FILING DATE: 2001-04-26
; PRIOR APPLICATION NUMBER: PCT/JP99/05841
; NUMBER OF SEQ ID NOS: 2
; SEQ ID NO 1
; LENGTH: 1403
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-285-408-1

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Query Match 100.0%; Score 7308; DB 14; Length 1403;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 1403; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 MATOQKASDBRISQDPHNLLPELSALLGDAVOLAKLEBEEDEKERAQKQINSQMRSE 60
DB 1 MATOQKASDBRISQDPHNLLPELSALLGDAVOLAKLEBEEDEKERAQKQINSQMRSE 60
QY 61 AKRLKTFVYIEPSSWIPQEMAAAGYFTGVSGICCFCCSLTFGAGLRLPIEDHKRF 120
DB 61 AKRLKTFVYIEPSSWIPQEMAAAGYFTGVSGICCFCCSLTFGAGLRLPIEDHKRF 120
QY 121 HPDCGFLNKDVGNIAKYDIRVNLKSLRGKMRYOEBEARLASFRMPPVYQGISPCV 180
DB 121 HPDCGFLNKDVGNIAKYDIRVNLKSLRGKMRYOEBEARLASFRMPPVYQGISPCV 180
QY 181 LSEAGVFTGKODTVOCCFGCGCLGMBEGDDPMKSHAKWFKCEFLRSKSSBEITQYI 240
DB 181 LSEAGVFTGKODTVOCCFGCGCLGMBEGDDPMKSHAKWFKCEFLRSKSSBEITQYI 240
QY 241 QSYKGFVDITGEHFNVSQWORELPMASAYCNDISIPAYBELRDSFPDMPRESAVGYALA 300
DB 241 QSYKGFVDITGEHFNVSQWORELPMASAYCNDISIPAYBELRDSFPDMPRESAVGYALA 300
QY 301 KAGLFYTGIKDIYQCFSCGCGCLEKMOEGDDPLDDHTRCFPCNCPFLQNMKSSAEVTPDQ 360
DB 301 KAGLFYTGIKDIYQCFSCGCGCLEKMOEGDDPLDDHTRCFPCNCPFLQNMKSSAEVTPDQ 360
QY 361 RGELELLETTSSNLEDSIAVGPVPEMAQGEAOWFOEAKNINEOLRAAYTSASFRHMS 420
DB 361 RGELELLETTSSNLEDSIAVGPVPEMAQGEAOWFOEAKNINEOLRAAYTSASFRHMS 420
QY 421 LLDISSDLATDHLGGCDLSIASGHISKPVEPLVLPVEFGNLSVNCVEGEASGKTVL 480
DB 421 LLDISSDLATDHLGGCDLSIASGHISKPVEPLVLPVEFGNLSVNCVEGEASGKTVL 480
QY 481 KKIAPFAMASGCCPLNRFOLVFYLSSSTRPDGLASIIDOLLEKGSVTECMRNIIQ 540
DB 481 KKIAPFAMASGCCPLNRFOLVFYLSSSTRPDGLASIIDOLLEKGSVTECMRNIIQ 540
QY 541 QLNQOVLFLDDYKEICSIPOVIGKLIQKNHLSRTCLLIAVTRNRADIRRYLETTLEIK 600
DB 541 QLNQOVLFLDDYKEICSIPOVIGKLIQKNHLSRTCLLIAVTRNRADIRRYLETTLEIK 600
QY 601 APFFYNTVCILRLKLFSHNMTLRKFMVYFGKNSLOKIQKTPLFVAICAHMFQYPPDP 660
DB 601 APFFYNTVCILRLKLFSHNMTLRKFMVYFGKNSLOKIQKTPLFVAICAHMFQYPPDP 660
QY 661 FDDVAVFKSYMERLSLRNKATAIILKATVSSCGELALKGFFSCCFEPPNDDLAAGVDE 720

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Db      661 FDDVAVFKSYMERLSLRNKATAEILKATVSSCGEALAKGFSCCFEPNDDLAEGVDED 720
Qy      721 EDTMCLMSKFTAQRORLPPYRPLSPAFORFLAGMRLEILDSDRQHODLGLYHLKQINS 780
Db      721 EDTMCLMSKFTAQRORLPPYRPLSPAFORFLAGMRLEILDSDRQHODLGLYHLKQINS 780
Qy      781 PMMTVAAYNNFLNYSVSLPSTKAGPKIVSHLLHLDVNKESLENISENDYLGHOPEISLQ 840
Db      781 PMMTVAAYNNFLNYSVSLPSTKAGPKIVSHLLHLDVNKESLENISENDYLGHOPEISLQ 840
Qy      841 MOLLGLMWOICPOAYFSWVSEHLVLALKTAYQSVTVAAACSPFVLQFLQGRTLTGALNTL 900
Db      841 MOLLGLMWOICPOAYFSWVSEHLVLALKTAYQSVTVAAACSPFVLQFLQGRTLTGALNTL 900
Qy      901 QYFPHPSLSILRSIHFPFRGNKTSPPRAHFSVLTCTCDKSOVPTIDDDYASAPENMNEW 960
Db      901 QYFPHPSLSILRSIHFPFRGNKTSPPRAHFSVLTCTCDKSOVPTIDDDYASAPENMNEW 960
Qy      961 EBNLAEKEDNVKSYMDMORRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGDMLEIL 1020
Db      961 EBNLAEKEDNVKSYMDMORRASPDLSTGYWKLSPKQYKIPCLEVDVNDIDVVGDMLEIL 1020
Qy      1021 MTFVSASORIELHNSHSGFTESITRPALELSKASVTKCSISKLSAABQELLLTLPBLE 1080
Db      1021 MTFVSASORIELHNSHSGFTESITRPALELSKASVTKCSISKLSAABQELLLTLPBLE 1080
Qy      1081 SLEVSGTIIQSDQIFPNLDKFLCLKELSVLDLEGNINVSFVPEEPFNHHEKLLIQISA 1140
Db      1081 SLEVSGTIIQSDQIFPNLDKFLCLKELSVLDLEGNINVSFVPEEPFNHHEKLLIQISA 1140
Qy      1141 EYDPSKLVKLQNSPNLHVFLKCNFSDPGLSMTMLVSCCKLTEIKFSDSFFQAVPFA 1200
Db      1141 EYDPSKLVKLQNSPNLHVFLKCNFSDPGLSMTMLVSCCKLTEIKFSDSFFQAVPFA 1200
Qy      1201 SLNPFISIKILNLEGOQFPDEETSEKFAVYILGSLNLELILPTGDSIYVAKLIIQCCQ 1260
Db      1201 SLNPFISIKILNLEGOQFPDEETSEKFAVYILGSLNLELILPTGDSIYVAKLIIQCCQ 1260
Qy      1261 QLHCLRVLSFFKTLNDSVVEIAKVAISGGFOKLENLKLSINHKITBEGYRNFQALDNM 1320
Db      1261 QLHCLRVLSFFKTLNDSVVEIAKVAISGGFOKLENLKLSINHKITBEGYRNFQALDNM 1320
Qy      1321 PNLQELDISRHFTECIRAQATTVKSLSQVLRPLRLRLMLSMWLDADIDALLNWKER 1380
Db      1321 PNLQELDISRHFTECIRAQATTVKSLSQVLRPLRLRLMLSMWLDADIDALLNWKER 1380
Qy      1381 HPOSKYLTIIQKWLPPSPITIQK 1403
Db      1381 HPOSKYLTIIQKWLPPSPITIQK 1403

RESULT 4
US-09-841-739-9
; Sequence 9, Application US/09841739
; Patent No. US20020034784A1
; GENERAL INFORMATION:
; APPLICANT: Bertin, John
; TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THERE
; FILE REFERENCE: 07334-329001
; CURRENT FILING DATE: 2001-08-29
; PRIOR APPLICATION NUMBER: US 09/697,089
; PRIOR FILING DATE: 2000-10-26
; PRIOR APPLICATION NUMBER: US 60/161,822
; PRIOR FILING DATE: 1999-10-27
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 782
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-841-739-9

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Query Match      54.3%; Score 3970.5; DB 9; Length 782;
Best Local Similarity 93.6%; Pred. No. 3,5e-308;
Matches 779; Conservative 1; Mismatches 1; Indels 51; Gaps 1;

Qy      451 EPIVLPEVPNNLNVKVVVEEESAGSKTVLLKTAFLMASGCCPLNRPQVLVYLSISSTR 510
Db      1 EPIVLPEVPNNLNVKVVVEEESAGSKTVLLKTAFLMASGCCPLNRPQVLVYLSISSTR 60
Qy      511 PDEGLASIIICDQLLEKESVTEMCMNIIQOLKNQVLFLLDDYKEICSIPOVIGKLIQKN 570
Db      61 PDEGLASIIICDQLLEKESVTEMCMNIIQOLKNQVLFLLDDYKEICSIPOVIGKLIQKN 120
Qy      571 HLSRTCLLAVRNRARDIRRYLETLEIKAPFNYTCILRKLPSHNTRLRKPNVYRG 630
Db      121 HLSRTCLLAVRNRARDIRRYLETLEIOAFEFYVTCILRKLPSHNTRLRKPNVYRG 180
Qy      631 KNSLOKIQKTPLEVAIAICAHMFQYFPDPSFDVAVFKSYMERLSLRNKATAEILKATVS 690
Db      181 KNSLOKIQKTPLEVAIAICAHMFQYFPDPSFDVAVFKSYMERLSLRNKATAEILKATVS 240
Qy      691 SCGEALAKGFSCCFEPNDDLAEGVDEDEDLTMCLMSKFTAQRURPPYRFLSPAQOF 750
Db      241 SCGEALAKGFSCCFEPNDDLAEGVDEDEDLTMCLMSKFTAQRURPPYRFLSPAQOF 300
Qy      751 LAGMRLEILDSDRQHODLGLYHLKQINSPMMTVASAYNNFLNYSVSLPSTKAGPKIVSH 810
Db      301 LAGMRLEILDSDRQHODLGLYHLKQINSPMMTVASAYNNFLNYSVSLPSTKAGPKIVSH 360
Qy      811 LHLVDNKESENISENDYLGHOPEISLQMLQGLMOICPOAYFSWVSEHLVLALKT 870
Db      361 LHLVDNKESENISENDYLGHOPEISLQMLQGLMOICPOAYFSWVSEHLVLALKT 420
Qy      871 AVQSVTVAAACSPFVLQFLQGRTLTGALNTQYFEDHPSLSILRSIHFPFRGNKTSPPRAH 930
Db      421 AVQSVTVAAACSPFVLQFLQGRTLTGALNTQYFEDHPSLSILRSIHFPFRGNKTSPPRAH 480
Qy      931 FSVLETCFDKSOVPTIDDDYASAPENMNERNLAEKEDNVKSYMDMORRASPDLSTGYW 990
Db      481 FSVLETCFDKSOVPTIDDDYASAPENMNERNLAEKEDNVKSYMDMORRASPDLSTGYW 540
Qy      991 KLSPKQYKIPCLEVDVNDIDVVGDMLEILMTVFSASQRIELHNSHSGFTESIRPALEL 1050
Db      541 KLSPKQYKIPCLEVDVNDIDVVGDMLEILMTVFSASQRIELHNSHSGFTESIRPALEL 600
Qy      1051 SKASVTKCSISKLELSAABQELLLTLPBLSLEYSCTIQSDQIFPNLDKFLCLKELSYVD 1110
Db      601 SKASVTKCSISKLELSAABQELLLTLPBLSLEYSCTIQSDQIFPNLDKFLCLKELSYVD 660
Qy      1111 LEGNINVSFVPEEPFNHHEKLLIQISAAYDPSKLVKLQNSPNLHVFLKCNFSDS 1170
Db      661 LEGNINVSFVPEEPFNHHEKLLIQISAAYDPSKLVKLQNSPNLHVFLKCNFSDS 697
Qy      1171 GSLMTMLVSCCKLTEIKFSDSFFQAVPVASLNPFLSKILNLEGOQFPDEETSEKFAVY 1230
Db      698 -----VASLNPFLSKILNLEGOQFPDEETSEKFAVY 729
Qy      1231 LGSLSNLEBELILPTGDSIYVAKLIIQCCQQLHCLRVLSFFKTLNDSVVEI 1282
Db      730 LGSLSNLEBELILPTGDSIYVAKLIIQCCQQLHCLRVLSFFKTLNDSVVEI 781

RESULT 5
US-10-449-315-9
; Sequence 9, Application US/10449315
; Publication No. US20030190679A1
; GENERAL INFORMATION:
; APPLICANT: Bertin, John
; TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THERE
; FILE REFERENCE: 07334-329001
; CURRENT APPLICATION NUMBER: US/10/449,315
; CURRENT FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: US /09/841,739

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;; PRIOR FILING DATE: 2001-08-29
;; PRIOR APPLICATION NUMBER: US 09/697,089
;; PRIOR FILING DATE: 2000-10-26
;; PRIOR APPLICATION NUMBER: US 60/161,822
;; PRIOR FILING DATE: 1999-10-27
;; NUMBER OF SEQ ID NOS: 16
;; SOFTWARE: FastSeq for Windows Version 4.0
;; SEQ ID NO 9
;; LENGTH: 782
;; TYPE: PRT
;; ORGANISM: Homo sapiens
US-10-449-315-9

Query Match 54.3%; Score 3970.5; DB 14; Length 782;

Best Local Similarity 93.6%; Pred. No. 3.5e-308; Mismatches 1; Gaps 1;

Matches 779; Conservative 1; Mismatches 1; Indels 51; Gaps 1;

QY 451 EPLVLPVFGNLSVNCVGEAGSGKTVLLKIAFLWASGCCPLNRFLQVFLYSLSSTR 510
DB 1 EPLVLPVFGNLSVNCVGEAGSGKTVLLKIAFLWASGCCPLNRFLQVFLYSLSSTR 60
QY 511 PDEGLASIIICDOLLEKSGVTEMCMRNIIQOLKNQVFLDDYKEICSIQVIGKLIQKN 570
DB 61 PDEGLASIIICDOLLEKSGVTEMCMRNIIQOLKNQVFLDDYKEICSIQVIGKLIQKN 120
QY 571 HLSRTCLIAVRNTRARDIRRYLETILEIKAPPVNTVCILRKLFSHNMTRLKRFMYVFG 630
DB 121 HLSRTCLIAVRNTRARDIRRYLETILEIKAPPVNTVCILRKLFSHNMTRLKRFMYVFG 180
QY 631 KNSLOKIQKTPFLVAICAHWFQYPPSPDDVAVFKSYMERLSLRNKATAEILKATVS 690
DB 181 KNSLOKIQKTPFLVAICAHWFQYPPSPDDVAVFKSYMERLSLRNKATAEILKATVS 240
QY 691 SCCEALAKGFFSCCFEENDDDLAAGVDEDEDLTMCMSKFTQRLRPFRFSPAFQEF 750
DB 241 SCCEALAKGFFSCCFEENDDDLAAGVDEDEDLTMCMSKFTQRLRPFRFSPAFQEF 300
QY 751 LACMRILIELDSROEHODGLYHLKQINSPMNTVSAVNNFLNYVSSLPTKAGPKIVSH 810
DB 301 LACMRILIELDSROEHODGLYHLKQINSPMNTVSAVNNFLNYVSSLPTKAGPKIVSH 360
QY 811 LHLVNDKESLENISENDVYLKHQPEISLQMOQLRGIMQICPOAYFSMVSEHLVLA LKT 870
DB 361 LHLVNDKESLENISENDVYLKHQPEISLQMOQLRGIMQICPOAYFSMVSEHLVLA LKT 420
QY 871 AYQSNVVAACSPVLOFLQGRITLTGALNTQYFFDPHESLSLRSHIFPIRGKNTSPRAH 930
DB 421 AYQSNVVAACSPVLOFLQGRITLTGALNTQYFFDPHESLSLRSHIFPIRGKNTSPRAH 480
QY 931 FSVLETCFDSQVPTTIDODVYASAFEPNMEWRNLAEKEDNVKSYMDQRRASPDLSGYM 990
DB 481 FSVLETCFDSQVPTTIDODVYASAFEPNMEWRNLAEKEDNVKSYMDQRRASPDLSGYM 540
QY 991 KLSPKQYKIPCLEVDVNDIDVGDMLIMTVFSASQRIELHLNHSRGFIESIRPALTEL 1050
DB 541 KLSPKQYKIPCLEVDVNDIDVGDMLIMTVFSASQRIELHLNHSRGFIESIRPALTEL 600
QY 1051 SKASVTKCSISKLELSAEQELLTPSLSELEVSCTIQSDQDIPFLDKFLCLKELSYD 1110
DB 601 SKASVTKCSISKLELSAEQELLTPSLSELEVSCTIQSDQDIPFLDKFLCLKELSYD 660
QY 1111 LGENINVFASIPREPFHMHMEKLLIOISAEDYPSKYKLIQNSPNLHVHLKCNFSDP 1170
DB 661 LGENINVFASIPREPFHMHMEKLLIOISAEDYPSKYKLIQNSPNLHVHLKCNFSDP 697
QY 1171 GSLMTMLVSCCKLTIKFSDFPQAVPFAVSLPFLSLKLTINLEGOFPDEETSEKFAVI 1230
DB 698 -----VASLTPFISLKLINLEGOFPDEETSEKFAVI 729
QY 1231 LGSLSNLEBELLPDGTGITYNAKLIIOCCOQLHCLRLVLSFPKTLNDSVVEI 1282
DB 730 LGSLSNLEBELLPDGTGITYNAKLIIOCCOQLHCLRLVLSFPKTLNDSVVEI 781

RESULT 6

US-10-029-386-33707

;; Sequence 33707, Application US/10029386
;; Publication No. US20030194704A1

;; GENERAL INFORMATION:

;; APPLICANT: Penn, Sharon G.

;; APPLICANT: Rank, David R.

;; APPLICANT: Hanzel, David K.

;; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR GI

;; FILE REFERENCE: AEOMICA-X-2

;; CURRENT APPLICATION NUMBER: US/10/029,386

;; CURRENT FILING DATE: 2001-12-20

;; NUMBER OF SEQ ID NOS: 34288

;; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1

;; SEQ ID NO 33707

;; LENGTH: 385

;; TYPE: PRT

;; ORGANISM: Homo sapiens

;; FEATURE:

;; OTHER INFORMATION: MAP TO U80017.1

;; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 0.91

;; OTHER INFORMATION: SWISSPROT HIT: Q13075, EVALU0.00e+00

US-10-029-386-33707

Query Match 27.0%; Score 1975; DB 14; Length 385;

Best Local Similarity 100.0%; Pred. No. 5.2e-149; Mismatches 0; Gaps 0;

Matches 385; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 707 FNDDBLAEGVDEDEDLTMCMSKFTQRLRPFRFSPAFQEFLLGMRLIELLSDROE 766
DB 1 FNDDBLAEGVDEDEDLTMCMSKFTQRLRPFRFSPAFQEFLLGMRLIELLSDROE 60
QY 767 HQDLGLYHLKQINSPMNTVSAVNNFLNYVSSLPTKAGPKIVSHLHLVNDKESLENI 826
DB 61 HQDLGLYHLKQINSPMNTVSAVNNFLNYVSSLPTKAGPKIVSHLHLVNDKESLENI 120
QY 827 NDDYLKHQPEISLQMOQLRGIMQICPOAYFSMVSEHLVLA LKTAVQSNVVAACSPVLO 886
DB 121 NDDYLKHQPEISLQMOQLRGIMQICPOAYFSMVSEHLVLA LKTAVQSNVVAACSPVLO 180
QY 887 FLOGRTLTGALNTQYFFDPHESLSLRSHIFPIRGKNTSPRAHFSVLETCFDSQVPTI 946
DB 181 FLOGRTLTGALNTQYFFDPHESLSLRSHIFPIRGKNTSPRAHFSVLETCFDSQVPTI 240
QY 947 DQDYASAFEPNMEWRNLAEKEDNVKSYMDQRRASPDLSGYM KLSPKQYKIPCLEVDV 1006
DB 241 DQDYASAFEPNMEWRNLAEKEDNVKSYMDQRRASPDLSGYM KLSPKQYKIPCLEVDV 300
QY 1007 NDDIVVGQDMLIMTVFSASQRIELHLNHSRGFIESIRPALTEL SKASVTKCSISKLELS 1066
DB 301 NDDIVVGQDMLIMTVFSASQRIELHLNHSRGFIESIRPALTEL SKASVTKCSISKLELS 360
QY 1067 AAQOELLTPSLSELEVSCTIQSD 1091
DB 361 AAQOELLTPSLSELEVSCTIQSD 385

RESULT 7
US-09-841-739-11
;; Sequence 11, Application US/09841739
;; Patent No. US20020034784A1
;; GENERAL INFORMATION:
;; APPLICANT: Bertin, John
;; TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THEREC
;; FILE REFERENCE: 07334-339001
;; CURRENT APPLICATION NUMBER: US/09/841,739
;; CURRENT FILING DATE: 2001-08-29
;; PRIOR APPLICATION NUMBER: US 09/697,089
;; PRIOR FILING DATE: 2000-10-26
;; PRIOR APPLICATION NUMBER: US 60/161,822
;; PRIOR FILING DATE: 1999-10-27

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; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 898
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: majority sequence
US-09-841-739-11

```

```

Query Match      26.0%; Score 1903; DB 9; Length 898;
Best Local Similarity 50.9%; Pred. No. 1.2e-142;
Matches 484; Conservative 88; Mismatches 214; Indels 164; Gaps 24;

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QY 451 EPLVPEVFGNLSVYMCVEGAGSGKTVLTKKIAFLMAGCCPLNRFQVLYSLSTR 510
DB 1 EQLVNGVLGNLSVYMCVEGAGSGKTVLTKKIAFLMAGCCPLNRFQVLYSLSTR 60
QY 511 PDEGLASITICDQLEKESVTEMCNRIIQQLKNQVFLDDYKEI-----CSIPQVIGKL 566
DB 61 ADGGLASITICDQLEKESVTEMCNRIIQQLKNQVFLDDYKEI-----CSIPQVIGKL 120
QY 567 IQKNHLSRTCLLIARTNRARDIRRYLETLEIAFPFYNVCLIKLFSNMTRLRKFM 626
DB 121 IQENHLSRTCLLIARTNRARDIRRYLETLEIAFPFYNVCLIKLFSNMTRLRKFM 180
QY 627 VYFGKNSLOKIQKTPLEVAALICA-HWFOYFPDPSFDVAVFKSYMERLSLRNK-----A 680
DB 181 VOIGKSGLOQLKTPLEVAALICA-HWFOYFPDPSFDVAVFKSYMERLSLRNK-----A 240
QY 681 TAELIKATVSSCGELAKGFSCCFERNDDDLAAGVDEDEDLTMCIMSKFTAQRLRPFY 740
DB 241 AADILKATVSSCGELAKGFSCCFERNDDDLAAGVDEDEDLTMCIMSKFTAQRLRPFY 300
QY 741 RFLSPAFQELFLAGRLLELDSRQEHQDLGLVHLKQINSFPMVTVAAYNNFLVYVSLSTR 800
DB 301 KFLSKAQELFLAGRLLELDSRQEHQDLGLVHLKQINSFPMVTVAAYNNFLVYVSLSTR 360
QY 801 TKAGPKVSHLHLVDNKESLENISENDVYLKQIPBEISLOMQLRGLMOICPOAYFSMVS 860
DB 361 VEAGRVAVSHLAADVNDKSGSLIGSIDVYLKQIPBEISLOMQLRGLMOICPOAYFSMVS 420
QY 861 EHLIVLALKTAYOSNTVAACSPVYLQ-FLOGRTLTGALNL-QY---FPDH-PEISLSLR 914
DB 421 INLLVLAGITAYOSNTVAACSPVYLQ-FLOGRTLTGALNL-QY---FPDH-PEISLSLR 480
QY 915 SIHPPIRGNTSPRAHFSVLETCFDSQOVPTIDQY--ASAFEPNMWERNLAEKEDNFK 972
DB 481 SIKLSIRGNTSPRAHFSVLETCFDSQOVPTIDQY--ASAFEPNMWERNLAEKEDNFK 540
QY 973 SYNDMQRASPDISTGWKLSPKQYKIP-----CLEVDVNDIDVV 1012
DB 541 SFEDLNKQATTDIGTGESSASLSLOIKRCAGVAGSLIVLSTCKNIYSLVEDVNDIDVV 600
QY 1013 GQDMLEIL--MTVFS---ASGRLEHLNHS---RGFESTIRPALEISKASVTK----- 1057
DB 601 GEDHLITVNLVTLSHDLASQRLBEGGLDLSGNLKGLELIRDALELSEAAIKIAEGL 660
QY 1058 -----CSISKLELSAEBELLITLPSLES---LE-----VSGTIOGQDOIFPNL 1098
DB 661 KNLKKNCLISLELSAAGGLLIIVKSLSEPCDLEIQLVSCCVAGAVQVLAQILNHL 720
QY 1099 DK--FLCLBELSVLEGNINVSFVPEEPFNHNEKKLIQISAEYDSKLVKLIQNSPN 1156
DB 721 VKLSITLDELSVDLDGNIAVSHVLPDEFNVLEQLTALLQIGAVD----- 767
QY 1157 LHFVHLKCNFPDPSGLMTALVSCCKLLEIKFSDSPFQAVPFVVASLPNFISLKITNLGQ 1216
DB 768 -----GSLSSL-----VSLLEEVISLVVILGEGQ 791
QY 1217 QPPDETSKFAVYI-LGSLSNLELILPTGD-----GIYVAKL----- 1254
DB 792 QLTDEISITIGAFIGLSISNLELILAGDVSDGMLAFMGVFEVAKLIVFEDSTKEF 851

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QY 1255 -----IIQQCQQLHCLRVLSFFKT-----LNDSDVEIAKVAISGFGQ 1292
DB 852 LPPPALVQQLSQV--LSVLSFLQTLRVLVGWLDDSDV-----VVIIGAFR 894

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RESULT 8

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US-10-449-315-11
; Sequence 11, Application US/10449315
; Publication No. US20030190679A1
; GENERAL INFORMATION:
; APPLICANT: Bertin, John
; TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THEREOF
; FILE REFERENCE: 07334-329001
; CURRENT APPLICATION NUMBER: US/10/449,315
; CURRENT FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: US /09/841,739
; PRIOR FILING DATE: 2001-08-29
; PRIOR APPLICATION NUMBER: US 09/697,089
; PRIOR FILING DATE: 2000-10-26
; PRIOR APPLICATION NUMBER: US 60/161,822
; PRIOR FILING DATE: 1999-10-27
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 898
; TYPE: PRF
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: majority sequence
US-10-449-315-11

```

```

Query Match      26.0%; Score 1903; DB 14; Length 898;
Best Local Similarity 50.9%; Pred. No. 1.2e-142;
Matches 484; Conservative 88; Mismatches 214; Indels 164; Gaps 24;

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QY 451 EPLVPEVFGNLSVYMCVEGAGSGKTVLTKKIAFLMAGCCPLNRFQVLYSLSTR 510

DB 1 EQLVNGVLGNLSVYMCVEGAGSGKTVLTKKIAFLMAGCCPLNRFQVLYSLSTR 60

QY 511 PDEGLASITICDQLEKESVTEMCNRIIQQLKNQVFLDDYKEI-----CSIPQVIGKL 566

DB 61 ADGGLASITICDQLEKESVTEMCNRIIQQLKNQVFLDDYKEI-----CSIPQVIGKL 120

QY 567 IQKNHLSRTCLLIARTNRARDIRRYLETLEIAFPFYNVCLIKLFSNMTRLRKFM 626

DB 121 IQENHLSRTCLLIARTNRARDIRRYLETLEIAFPFYNVCLIKLFSNMTRLRKFM 180

QY 627 VYFGKNSLOKIQKTPLEVAALICA-HWFOYFPDPSFDVAVFKSYMERLSLRNK-----A 680

DB 181 VOIGKSGLOQLKTPLEVAALICA-HWFOYFPDPSFDVAVFKSYMERLSLRNK-----A 240

QY 681 TAELIKATVSSCGELAKGFSCCFERNDDDLAAGVDEDEDLTMCIMSKFTAQRLRPFY 740

DB 241 AADILKATVSSCGELAKGFSCCFERNDDDLAAGVDEDEDLTMCIMSKFTAQRLRPFY 300

QY 741 RFLSPAFQELFLAGRLLELDSRQEHQDLGLVHLKQINSFPMVTVAAYNNFLVYVSLSTR 800

DB 301 KFLSKAQELFLAGRLLELDSRQEHQDLGLVHLKQINSFPMVTVAAYNNFLVYVSLSTR 360

QY 801 TKAGPKVSHLHLVDNKESLENISENDVYLKQIPBEISLOMQLRGLMOICPOAYFSMVS 860

DB 361 VEAGRVAVSHLAADVNDKSGSLIGSIDVYLKQIPBEISLOMQLRGLMOICPOAYFSMVS 420

QY 861 EHLIVLALKTAYOSNTVAACSPVYLQ-FLOGRTLTGALNL-QY---FPDH-PEISLSLR 914

DB 421 INLLVLAGITAYOSNTVAACSPVYLQ-FLOGRTLTGALNL-QY---FPDH-PEISLSLR 480

QY 915 SIHPPIRGNTSPRAHFSVLETCFDSQOVPTIDQY--ASAFEPNMWERNLAEKEDNFK 972

DB 481 SIKLSIRGNTSPRAHFSVLETCFDSQOVPTIDQY--ASAFEPNMWERNLAEKEDNFK 540

QY 973 SYNDMQRASPDISTGWKLSPKQYKIP-----CLEVDVNDIDVV 1012

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Db 541 SFEDLNKQAITDGLGTFSPSSASSIQIKKACAGVAGSLVLTSTCKNIYSLEVDASDLTVV 600
Qy 1013 GQDMLEIL--MVFVS-----ASQRIELAHNS-----RGFIESIRPALELSKASTK----- 1057
Db 601 GEDHLLTVNLTVLSTHDLASQRLLEGGLTDSIGNLGLIELRLDALELSBAGATKIAEGL 660
Qy 1058 -----CSISKELSAEQELLLTPSLRS-----LE-----VSGTIQSODQIFPNL 1098
Db 661 KKLKKKCLISLELSBAGGLLIVKLSLSEPCDLEIQLVSGCVAGAVQILAHNL 720
Qy 1099 DK--FLCKELSVLEGNINVSFVIDEFPNFMHEKLLIQISAEDPSKLVKLIONSPN 1156
Db 721 VKLSLIDSELASVDLDGNIAVSHVIDEFNVLEQLTALLQICADV----- 767
Qy 1157 LHVPHLKCFPSDFGLMTMLVSCKLTETKPSDSFQAVPFPASLPNFIKLINLEGO 1216
Db 768 -----GSLSSL-----VASLEEVISLVILGLEQ 791
Qy 1217 QPDEETSEKFAVI--LGSLSNLEELLPTGD-----GIYVAKL----- 1254
Db 792 QLTDEIISLGAFIGISLSNLEELLAGDVSSDGLAMPGVFEVAKLLVFPDESTKEP 851
Qy 1255 -----IIQCQQLHCLRVLSFPKT-----LINDSVETIAKVALSGEQ 1292
Db 852 LPDPLALVQQLSQV--LSVLSFQIQTARLVGMQLDDDSV-----VVIITGAFK 894
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RESULT 9

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US-10-029-386-33933
; Sequence 33933, Application US/10029386
; Publication No. US20030194704A1
; GENERAL INFORMATION:
; APPLICANT: Penn, Sharon G.
; APPLICANT: Rank, David R.
; APPLICANT: Hanzel, David K.
; TITLE OF INVENTION: HUMAN GENOME-DERIVED SINGLE EXON NUCLEIC ACID PROBES USEFUL FOR G
; FILE REFERENCE: AEWICA-X-2
; CURRENT APPLICATION NUMBER: US/10/029,386
; NUMBER OF SEQ ID NOS: 34288
; SOFTWARE: Annomax Sequence Listing Engine vers. 1.1
; SEQ ID NO 33933
; LENGTH: 203
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: MAP TO AC005031.1
; OTHER INFORMATION: EXPRESSED IN HELA, SIGNAL = 1.6
; OTHER INFORMATION: EXPRESSED IN LUNG, SIGNAL = 0.95
; OTHER INFORMATION: SWISSPROT HIT: Q13075, EVALUO 1.00e-112
US-10-029-386-33933
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Query Match 14.2%; Score 1037; DB 14; Length 203;
Best Local Similarity 100.0%; Pred. No. 2,1e-74;
Matches 203; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 389 MNGEAMQFOEAKNLEQRAAYTSAPFRHMSLIDISSDLATDHLGCDLSIAKSIKRP 448
Db 1 MNGEAMQFOEAKNLEQRAAYTSAPFRHMSLIDISSDLATDHLGCDLSIAKSIKRP 60
Qy 449 VOEPVLVPEVFGNLSVMCEVGEAGSGKTVLLKIAFLWAGCCPLLNRFOLVFIYLSLS 508
Db 61 VOEPVLVPEVFGNLSVMCEVGEAGSGKTVLLKIAFLWAGCCPLLNRFOLVFIYLSLS 120
Qy 509 TRPDEGLASIIICDQLEKESGVTEMCRNIIQOLKNQVFLDDYKESIPQVIGKLIQ 568
Db 121 TRPDEGLASIIICDQLEKESGVTEMCRNIIQOLKNQVFLDDYKESIPQVIGKLIQ 180
Qy 569 KXHLSTCLLIIVRTNRADIR 591
Db 181 KXHLSTCLLIIVRTNRADIR 203
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RESULT 10

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US-09-841-739-5
; Sequence 5, Application US/09841739
; Patent No. US20020034784A1
; GENERAL INFORMATION:
; APPLICANT: Bertin, John
; TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THEREK
; FILE REFERENCE: 07334-329001
; CURRENT APPLICATION NUMBER: US/09/841,739
; CURRENT FILING DATE: 2001-08-29
; PRIOR FILING DATE: 2000-10-26
; PRIOR APPLICATION NUMBER: US 60/161,822
; PRIOR FILING DATE: 1999-10-27
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 1204
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-841-739-5
```

Query Match 9.0%; Score 661; DB 9; Length 1204;
Best Local Similarity 23.5%; Pred. No. 4,4e-43;
Matches 268; Conservative 199; Mismatches 427; Indels 245; Gaps 43;

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Qy 341 NCPFLQNMK--SSAEVTPD--LQSRGELCELLTTSNSLSDSIAGPIVPEMAGGEAM 396
Db 216 NYPLFQDLNGQSFEEQWVFNITSSLIGLPHQTSGLD----- 257
Qy 397 FOEAKNLEQRAAYTSAPFRHMSLIDISSDLATDHLGCDLSI--ASKHISKPV----- 449
Db 258 -----LQDLKDLVHTPSFLNP-----YPLSEDDIDILFNLSKTFEPVLMRK 299
Qy 450 -----QEPVLVPEVFGNLSVMCEVGEAGSGKTVLLKIAFLWAGCCPLLNRFOLVY 503
Db 300 DQHHHRVBDLTGLNLQALQSPCIIIEGSGKKSITLQRIANMLMSGCKALKLKFVVF 359
Qy 504 LSLSTRPDEGLASIIICDQLEKESGVTEMCRNIIQOLKNQVFLDDYKESIPQVIGKLIQ 561
Db 360 LRLS--RAQGGFETLCQDLIDIPGITRKQTFMAMLIKROVLFLLDGYNEF--KPOHC 415
Qy 562 -VIGKLIQKNIHSRCLLIIVRTNRADIRYLETLEIKARFPYTVCLIRLTFPHNMT 620
Db 416 PEIEALIKENHRPKMNVITTTTECLRIHQFGALTAEVGDMTESDAQALIREVLKELA 475
Qy 621 RLKRFVYFGKQSLQIKQTPLEFVAALCAHWFOYRFPDPAVFKSYMELSLRNK- 679
Db 476 --EGLLIQIKSRCLRNLMKTLFVYITCAIQMGSEFPHSHQTLFHTFYDILQKNG 533
Qy 680 -----ATAEILKATVSSGELALKGFSCCFEENDDLAEGVDEDEDLTMCLMSKFTAO 734
Db 534 KHKGVAAADPFR--SLDHCGDLALBGFVSHKPFDELQDV--SSVNEEDVLLTTGCLCKYTAQ 590
Qy 735 RLKRFYRPLSPAFQETLAGMRLLIEDSDROHODGLYHLKQINSPPMTVSNYNNFLMY 794
Db 591 RPKPKTKFPHKSFQETAGARRLSLTSHEPEVTKGNGYLSIDITSYSSSLRY 650
Qy 795 V--SSLPSTKAPKIVYSHLLVLDN-----KESLENISENDVYLKIQPEI 837
Db 651 TCGSSVEATRA--VMKHLAAYQHOCGLGLSIARPLRQESLSQVKN----- 696
Qy 838 SLQMDLRLGLMOICPOAYFSWSEHLLVYALATAYQSNL--VAACSPFVLQFLOGRTLLTG 896
Db 697 TTEQETLKAI--NINSFVECGIHL-----YQESTSKALSQEFPAFQGLKSLYIN 744
Qy 897 ALNL-QYFPDHESSLRSIHPIRGKNTSPRAHFSVLETPDQSGQVTTIOPDYASAP 955
Db 745 SGNIIDYLPD-----PFEHLPNC--ASALDFIKLDFYGG-- 776
Qy 956 PNMEWRNLAEKEDNVKSYMDQRRASPDLSTGYWKLSPQYKIP----- 1000
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Db 777 AMASWE-----KAAADTGGIHMEBAPETY-IPSRVSLFFWMOEPR 817
Qy 1001 CLEVDVNDIVGQDMLEIMTVFSASQRIEILHNSRGFIESIRPALELSKASVTKCSI 1060
Db 818 TLEVTLDPSKLNKODIRYIGKITSATSRLQIRCAVAGASISLVSTCK-NIYSLMV 876
Qy 1061 SKELSAABOELLTLPLSLESLEVSGTIOQDQIFPN--LDKFLCLKELSVDEGINVNF 1118
Db 877 EASPLTIEDERHITSVNLKTLSTH---DIONQRPLPGSLTDSIGNLNKLTLMINDNKM- 932
Qy 1119 SVIPEEPFNHMEKLLIQISAEYDPSKLVKLIONSNNLHVPHLKCNFSDPSGLMTMLV 1178
Db 933 -----NEEDAITKLAEGLNKKMCKLFHL--THLSDIGEGMDYIV 969
Qy 1179 S-----CKKLTEIKFSDSFF--QAVPFVA-SLPNFIKLILNIEGOQFDEESEKPAY 1229
Db 970 KSLSSBPC-DLEETQVASCCLSANAVKILNHLNVLKSLIDL-SENYLEKDGNEALHE 1027
Qy 1230 ILGSLNLEE--LILPTGDDIYRVAKLIIQCCQGLHCLRLVSPFKTLNDSVVEIAKVA 1286
Db 1028 LIDRMNVLEQLTALMLPWGCDVQGSLSLKLHEEVPQLVKGLKNMRLTDT-----EIR 1082
Qy 1287 ISGGF-----QKLENLKLSINHKITEGYRNPFOALDNMPNIQELDISHFTECICKAQ 1340
Db 1083 ILGAFGKNPLKNPQQLNLAGN-RVSSDGMIAFWGVFENLKQLVFDFDS--TKEFLLDP 1138
Qy 1341 TTVKSLSQCVLRPLRLILNMLSLDLADIALNLNWKERHPQSKYLTILQKWLFPSP 1399
Db 1139 ALVRKLSQVLSKLTFLQEARLVGMQFDDDLVSITTEKAO-----MICPWLKILP 1189

RESULT 11
US-10-449-315-5
; Sequence 5, Application US/10449315
; Publication No. US20030190679A1
; GENERAL INFORMATION:
; APPLICANT: Bertin, John
; TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THERE
; FILE REFERENCE: 07334-329001
; CURRENT APPLICATION NUMBER: US/10/449,315
; PRIOR FILING DATE: 2003-05-30
; PRIOR APPLICATION NUMBER: US/09/841,739
; PRIOR FILING DATE: 2001-08-29
; PRIOR APPLICATION NUMBER: US 09/697,089
; PRIOR FILING DATE: 2000-10-26
; PRIOR APPLICATION NUMBER: US 60/161,822
; PRIOR FILING DATE: 1999-10-27
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 1204
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-449-315-5

Query Match 9.0%; Score 661; DB 14; Length 1204;
Best Local Similarity 23.5%; Pred. No. 4.4e-43;
Matches 268; Conservative 199; Mismatches 427; Indels 245; Gaps 43;

Qy 341 NCPFIOMNK-SGAEVPRD---LQSRGELCELETTSESULEDSIANGVPIPEMAGEAO 396
Db 216 NTPLEFQDLNGQSFEEIOMNVFFNITSSLLGFHQITSEGLDD----- 257
Qy 397 FOEAKNLNQLRAAYTSASFRHMSLLDISDLATHLIGCDLSI---ASKHISKPY----- 449
Db 258 -----LAQDLKDIVHTPSFLNF-----YPLGEDIDILFNKSTTEEVLMRK 299
Qy 450 -----QEPVLVPEVFGNINSVWCVEGEAGSKTVLLKKIAPILMASGCCPILNRFQVLY 503
Db 300 DQHNHRVEQLTLNGILOAQSPCIIIEGEGKSKTLLQRIAMLMWSGCKALKTKFVYVF 359
Qy 504 LSLSTRPBGSLAIIICDQLKEGSVTMCNRIIQQAKQVLFLLDDYKICISIPQ-- 561

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Db 360 LRLS--RAQGGUPETICDQLDLPGRITQRGTFMAMLLKLRQRLFLLDGNE--KPONC 415
Qy 562 -VIGKLIQKNHLSRTCLLIAVTRNARDIRRYETLLEIKAPFYNTVCILKLFSHNNT 620
Db 416 PEIEALIKENHRKNNVITVTTTECRHRIROFALTAEVGMDEDAQALIREVLKEKA 475
Qy 621 RLKFMVYVGNOSLQIKIKTPLFVAALICAHMFOYFDFSPDVANFKSYMELSLRNK- 679
Db 476 --EGLLIQIKSHCLNLMKTLPLFVVITCAIQMGSEEFHSHTQTLTFHTFYDLLQKNH 533
Qy 680 -----ATAEILKATVSSCGELAKGFSCCFEENDDLAAGVDEDEDLTMCIMSKFTQA 734
Db 534 KHKGAASDPFR-SLDHCGDILAEGVFSHKPPELDV--SSVNEBVLITGLLCYTAQ 590
Qy 735 RLKRFRLPSPAQOEFLAEMRLIELDSDROEHQDILGYHLKQINSPPMTVAYNNFLNY 794
Db 591 RKPCKYKFFHKSPQOEYTAARRLSLTSHEPEVTKGNGLQKWSISDITSTYSGLARY 650
Qy 795 V--SLPSTKAPKIVSHLHLVDN-----KESLENISENDYILKHQPEI 837
Db 651 TCGSSVEATRA--VKKHLAAYQHGCLLGLSIARPLMRQSLQSVKN----- 696
Qy 838 SLQMLRLGLMOICPOAYSVWSEHLVYALKTAYQSNV--VAACSPVYLQFQGRTLTLG 896
Db 697 TTEQELIKAI-----NINSFVECGIHL-----YQESTSKALQOEFAFQKGLYIN 744
Qy 897 AANL-QYFPHDPESLSLRSIHFFIRGNKTSRAIFSVLETFEDSGVPTTIQDYASAFE 955
Db 745 SGNIIDVLYPD-----FFEHLPNC--ASALDFIKLDEYVG-- 776
Qy 956 PMNEMERNLAEKEDVNSYMDQRRASPDLSTGYWKLSPROYKP----- 1000
Db 777 AMASWE-----KAAADTGGIHMEBAPETY-IPSRVSLFFWMOEPR 817
Qy 1001 CLEVDVNDIVGQDMLEIMTVFSASQRIEILHNSRGFIESIRPALELSKASVTKCSI 1060
Db 818 TLEVTLDPSKLNKODIRYIGKITSATSRLQIRCAVAGASISLVSTCK-NIYSLMV 876
Qy 1061 SKELSAABOELLTLPLSLESLEVSGTIOQDQIFPN--LDKFLCLKELSVDEGINVNF 1118
Db 877 EASPLTIEDERHITSVNLKTLSTH---DIONQRPLPGSLTDSIGNLNKLTLMINDNKM- 932
Qy 1119 SVIPEEPFNHMEKLLIQISAEYDPSKLVKLIONSNNLHVPHLKCNFSDPSGLMTMLV 1178
Db 933 -----NEEDAITKLAEGLNKKMCKLFHL--THLSDIGEGMDYIV 969
Qy 1179 S-----CKKLTEIKFSDSFF--QAVPFVA-SLPNFIKLILNIEGOQFDEESEKPAY 1229
Db 970 KSLSSBPC-DLEETQVASCCLSANAVKILNHLNVLKSLIDL-SENYLEKDGNEALHE 1027
Qy 1230 ILGSLNLEE--LILPTGDDIYRVAKLIIQCCQGLHCLRLVSPFKTLNDSVVEIAKVA 1286
Db 1028 LIDRMNVLEQLTALMLPWGCDVQGSLSLKLHEEVPQLVKGLKNMRLTDT-----EIR 1082
Qy 1287 ISGGF-----QKLENLKLSINHKITEGYRNPFOALDNMPNIQELDISHFTECICKAQ 1340
Db 1083 ILGAFGKNPLKNPQQLNLAGN-RVSSDGMIAFWGVFENLKQLVFDFDS--TKEFLLDP 1138
Qy 1341 TTVKSLSQCVLRPLRLILNMLSLDLADIALNLNWKERHPQSKYLTILQKWLFPSP 1399
Db 1139 ALVRKLSQVLSKLTFLQEARLVGMQFDDDLVSITTEKAO-----MICPWLKILP 1189

RESULT 12
US-10-156-733-2
; Sequence 2, Application US/10156733
; Publication No. US20030099969A1
; GENERAL INFORMATION:
; APPLICANT: Alnemri, Emed S.
; TITLE OF INVENTION: IPAF, AN ICB-PROTEASE ACTIVATING
; TITLE OF INVENTION: FACTOR
; FILE REFERENCE: 480140.477

```

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/ CURRENT APPLICATION NUMBER: US/10/156,733
/ CURRENT FILING DATE: 2002-05-24
/ NUMBER OF SEQ ID NOS: 14
/ SOFTWARE: FASTSEQ for Windows Version 4.0
/ SEQ ID NO 2
/ LENGTH: 1024
/ TYPE: PR
/ ORGANISM: Homo sapiens
US-10-156-733-2

Query Match      8.9%; Score 654; DB 14; Length 1024;
Best Local Similarity 23.7%; Pred. No. 1,2e-42;
Matches 263; Conservative 197; Mismatches 410; Indels 238; Gaps 42;

QY 344 FLOMMS -GAEVTPDQSGRELCLETTSESNTLEDSIANGLVPPMAOGEAQMPEAKN 402
DB 69 FLKSLKEMVYPLFODLNGO---SLPHQTSGLDLD----- 100
QY 403 LNEQLRAAYTSASFRRMSLDDISSDLATDHLGCDLSI---ASKHISKPV----- 449
DB 101 LAGDLKDLVHTPSFLNF-----YPLGEDIDIFNLKSTTEPVLMRKQHHNR 148
QY 450 QEPVLPEVFGNINSVMCEGEAGSGKTVLLKKIAFLMASGCCPLNRFQLVFYLST 509
DB 149 VEQLTLNGLLQALQSFCIIIEGSGKSTLLQRIAMLMGSGCKALKFKFVFPLRLS-- 206
QY 510 RPDEGLASIIICDOLLEKESVTEMCNRNIIQOLKNQVFLDDYKELCSIPQ---VIGKL 566
DB 207 RAGGSLFETLCDLIPGTRIKOTPMAMLLKRLORVFLDLBYNEF--KPCNCPREBAL 264
QY 567 IQKHLSTRCLLIVATNRADIRRYLETILEIKAPFYNTVCLRLKLSHNNTRRLKFM 626
DB 265 IKENHAFKMNVIYTTTECLRHIRQFGALTAEVGDMEDSAOLILIBVLKELA--EGLL 322
QY 627 VYEGKQSLQIKOTPLFVAALCAHWFQYPPDSDVAVKSYMERLSIRNK-----A 680
DB 323 LQIQKSRCLRNLMKTPLFVVTICALQWGESEFHSHTQTTLFHTFYDLLIQKNKHKHGYA 382
QY 681 TAILKATYSGCCGLLKFSCCFERNDDLAEGVDEDEDLTMCLMSFTQORLRPFY 740
DB 741 RFLSPAFQEFPLAGRLIELLSDROEHQDGLYHLKQINSPPMTVSANNFLNVV--SSL 798
QY 799 PSTKAGPKIVSHLLHVDN-----KESLENISENDVYLKHPREISLQMOQL 843
DB 844 LRGLMQLCPQAFVSMVSEHLLVLAALKTAYQSNL--VAACSPFVLOFLOGRTLTGALNL-Q 901
QY 902 YFPDHPESLILRSIHPRIRKNTSPRAHPSVLETCDKQOVPTIDODVYSAFEPMNEME 961
DB 962 RNLAEKEDNVKSYMQRASPDLSGTGYMLSPFOYKIP-----CLEVDV 1006
QY 1007 NQIDVVGQDMLEILMTVFSASQRIELHNLNSRGFIBIRPALBSKASVTKGISKLELS 1066
DB 667 RDSKSNKMODIRYLKGFSSATSRLQIKRCAGVAGSLVLTCK--NYSILMVEASPLT 725
QY 1067 AAEQELLTLPSLESGTISQODIPFN--LDKPLCKELSVDELEGINVFSVPIEE 1124
DB 726 IEBERRITSTYNLKTLSIH---DLQNGRLRCGLTDSGLNKLTKLIMDIYK----- 775
QY 1125 FPNFHHMEKLLQISAEYDPSKLVKLIONSFNLAHFHLKCNFPSPDGLTMLVLS----- 1179
DB 776 -----NEEDAIKLAEGKLNKKMCLFPL--THLSDIGGDVYIKSLISE 818
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QY 1180 -CKULTEIKFSDFSFF--QAVPFA--SLPNFISLKIINLEGOQFPDEBTESEKFAVILIGSL 1235
DB 819 PC-DLEEIGLVGCCSANNKVLKLAQVNLHVLTSLIDL--SENVLEKDGNEALHELDRNM 876
QY 1236 NEE---LILPTGDIYRAKLIIOCCQQLHCLRLVSFFKTLNDSVVEIAKALISGGF- 1291
DB 877 VLEQLTALMLPWGCDVQGSLSILKLHEVPQLVTKLGNMRLTDT-----EIRILGAF 931
QY 1292 -----QKLENLKSTINHKTTEGYNRFQALDNMPULQELDISRHFTTECIKAQATTYKSL 1346
DB 932 GKNPLKNFQOLNLAG-RVSSDGLAFWGVFENLKOLVFPDFS---TKFELPDALVRKL 987
QY 1347 SOCVLRPLRLIRLNLMSWLLDADLALL 1374
DB 988 SOVLSTLTLQEARLVGMQFDDDDLSVI 1015

RESULT 13
US-10-221-097-49
/ Sequence 49; Application US/10221097
/ Publication No. US20030144476A1
/ GENERAL INFORMATION:
/ APPLICANT: Agarwal, Pankaj
/ APPLICANT: Murodock, Paul R.
/ APPLICANT: Rizvi, Safia K.
/ APPLICANT: Smith, Randall F.
/ APPLICANT: Xiang, Zhaoying
/ TITLE OF INVENTION: NOVEL COMPOUNDS
/ FILE REFERENCE: GP50016
/ CURRENT APPLICATION NUMBER: US/10/221,097
/ CURRENT FILING DATE: 2002-09-06
/ PRIOR APPLICATION NUMBER: PCT/US01/07143
/ PRIOR FILING DATE: 2001-03-05
/ PRIOR APPLICATION NUMBER: 60/187,107
/ PRIOR FILING DATE: 2000-03-06
/ PRIOR APPLICATION NUMBER: 60/236,874
/ PRIOR FILING DATE: 2000-10-03
/ PRIOR APPLICATION NUMBER: 60/188,916
/ PRIOR FILING DATE: 2000-03-13
/ PRIOR APPLICATION NUMBER: 60/237,846
/ PRIOR FILING DATE: 2000-10-03
/ NUMBER OF SEQ ID NOS: 52
/ SOFTWARE: FASTSEQ for Windows Version 3.0
/ SEQ ID NO 49
/ LENGTH: 1070
/ TYPE: PR
/ ORGANISM: Homo sapiens
US-10-221-097-49

Query Match      8.9%; Score 654; DB 14; Length 1070;
Best Local Similarity 23.3%; Pred. No. 1,3e-42;
Matches 282; Conservative 213; Mismatches 454; Indels 260; Gaps 48;

QY 277 YEELRYD-----SFKMPRESAVGVALAKAGLFTYGIKIDIVQSCSGCLEKMOEGBDP 331
DB 2 YKSLNIDCEDDLNMLDLPAEKYGVNVRV-----CWGRI-RFKGMYP 43
QY 332 LD-----DHTRCFNPCLQNNKSSA--EVTPLD-----QSRGEL---CELYETTSSES 374
DB 44 LDVLANFIKONSRA-----LIQRMGMQTVIKQITDLDLVMMVNLNBEVNLICCEFEVDEDAAR 98
QY 375 NLEDSIAVGPIVPEMAOGEAQMFOEAKNINDEQVRAAYTSAPRNMSLDIDSSLATD--- 431
DB 99 GI-----HNWILKKGESCNLFLKSLKEMVYPLFQDLNGQSLFHTQTSBGDLDAQDLKD 153
QY 432 -----HLGCDLSI---ASKHISKPV-----QEPVLPEVFGNINSVMCV 468
DB 154 LVHTPSFLNFPYRGEIDIDIFNLKSTTEPVLMRKQHHNRVQGLTLNGLQALQSPCII 213
QY 469 EGEAGSGKTVLLKKIAFLMASGCCPLNRFQLVFYLSTSTRDEGLASIIICDOLLEKES 528
DB 214 EGSBGKSTLLQRIAMLMGSGCKALKTKFKFVFPLRLS--RAGGSLFETLCDLIPG 271
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Qy	529	SVTEBCHMNINIOQLKNOVLFLLDDYKEJCSIPQ---	VLGKLIQKHNLSSTCLIAVRN	585
Db	272	TIRKOTPRAMLIKFORVULFELDGNER--KONCPZEIALKEHNRKKNVYVTTTTEC	329	
Qy	586	ARDIRRYLETTLEIKAPFPYNTVCLIKRLFSHNMTLRKFMVYFGKNSLOKIOKTPPLFV	645	
Db	330	LRIHQFALTRAEVDMTEDESAQALIRREVLIKELA--EGLLIQIKSRCLRMLMTPFLV	387	
Qy	646	AALCAHMYQYPPDPFDDVAVFKSMERLSLRNK-----ATALLIKATVSSCEBLAKG	699	
Db	388	VITCAIQMGESBEFHSHOTYTLFHTFYDILLIQNKHKHGVAADEIR--SLDHCGLALBG	446	
Qy	700	FFSCCFEENNDDLAGVDEDEDLFMCMSSKFTPAORLPRFYFLSPAFQFSLAGRILEL	759	
Db	447	VFSHKFDDELQDV--SSVNEVDYLLTGGLCKTIAORFPFKYFFPKSJOEYTAGRSL	504	
Qy	760	LDSDRQEHQDGLYHLKQINSEPMTVSAYNNFLANY--SSLSTAGPKVSHLLHLVDN	817	
Db	505	LTSHPBEVTKNGVLOKQWVSIIDITSTYSLSLRATCCSSVEATRA--VMHGLAANYQH	561	
Qy	818	-----KSELENISENDYLUKHOPELSLOMQLRGIMQICPOAYFEMSEH	862	
Db	562	GCLLGLSLAKRPLMFOESLOSQVKN-----TTCEQELIKAI-----NINSPFEGCIH	606	
Qy	863	LLVLALKTAAYOSNT--VAACSPFVLQFLOGRLTTLGALNL--OYFPHPSLSILRSITHPI	920	
Db	607	L-----YQESTSKSALSOEFAPFGOKSLYUINSINIPDLPLF--	643	
Qy	921	RGNKTPSRANHSVLETCDFKSOVPTIIDODYASAFEPNMEWERNLAEKEDNVKSYMDQOR	980	
Db	644	-----FPHLPNC--ASALDPTIKLDPFGC--AMASWE-----K	672	
Qy	981	ASPDLSICVWKLSPKQYKIP-----CLEVDVNDIDVGDMLIEMTVFS	1025	
Db	673	AAABOTGIGHMEAPETY-IPSRASVLPFNWKOEFRTLEVTLRDFSKLNKODIRYLGIKIFS	731	
Qy	1026	ASQRIEHLNHSRGITESISRALBELSKASVTKCSISKLELSAABEMLLTPLSLELVS	1085	
Db	732	SATSLRLOIKRCAGVAGSLSVLSTCK--NYSLSWEASPLTIEDRRHITSYNNLTLSIH	790	
Qy	1086	GTIOSODOIFPN--LDKFLCEKELSEVDLEGNINVSVIPPEFPNFMHEKULLIQISAEYD	1143	
Db	791	---DLQNRRLPGJITDLSGNLKNLTKLIMDNIKM-----NEED	825	
Qy	1144	PSKVLKLIQNSPNLHVFLKCNFSDPQSLMTMLVS-----CKKLTIKYSDSF--QA	1195	
Db	826	AIRKLAEGKJNKKKKCLFHL--THLSIDIOEGMDYIVKLSLSEBPC-DLEBIEQVSSCCLSIANA	882	
Qy	1196	VPFAV-SLPNFISLKIUNLEGOQFPEDETSKKNVLIQSLNLEB--LIIPDGGIARY	1251	
Db	883	VKIILAQNHNLVVKLSIDL--SENYLEKGNELHELLIDRMNVLRYQLTALMLPFGGDVQGS	941	
Qy	1252	AKLTIQOCCQALCLRVLSFFKTLNDDSVAEIATAKVASISGF-----QKLENIUKLSINHKI	1305	
Db	942	LSLILKHLAEVRQVLVKGLKMWRLTDT-----EIRILGAFFGKNPLKMFQOLNLAGN--RV	995	
Qy	1306	TEBGYRNFQALDNMNPNIQELDISHFTECIKAQATYKLSIQCVLRPLIRLIRLNMISWL	1365	
Db	996	SSDGMWLFMVGVENIKQLVFPDFG---TKFELPDAIIVRKLSQLVSLTFLQEARLVQWQ	1052	
Qy	1366	LDADDIALL	1374	
Db	1053	FDDDDLSVT	1061	

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RESULT 14
US-09-841-739-2
; Sequence 2, Application US/09841739
; Patent No. US20020034784A1
; GENERAL INFORMATION:
; APPLICANT: Berlin, John
; TITLE OF INVENTION: NOVEL MOLECULES OF THE CARD-RELATED PROTEIN FAMILY AND USES THERE

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; FILE REFERENCE: 07334-329001
; CURRENT APPLICATION NUMBER: US/09/841,739
; CURRENT FILING DATE: 2001-08-29
; PRIOR APPLICATION NUMBER: US 09/697,089
; PRIOR FILING DATE: 2000-10-26
; PRIOR APPLICATION NUMBER: US 60/161,822
; PRIOR FILING DATE: 1999-10-27
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 2
; LENGTH: 1024
; TYPE: PR1
; ORGANISM: Homo sapiens
; US-09-841-739-2

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Query Match	8.9%;	Score 653;	DB 9;	Length 1024;
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Matches 263; Conservative 197; Mismatches 410; Indels 238; Gaps 42;

QY 344 FLQNMKS-SAEVTPDQSRGELCELLETTSSENLSDIAVGPIVPENAOGEAQWFOEAKN 402

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Db      69 FLKSLKEWNYPLQDLNGQ-----SLFHQTSGLDD----- 100
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403 LNEQLRAAYTSASFRHMSLLDISDLATDHLGCDLSI--ASKHISKPV----- 449

Db 101 LAQDLKDLHTPSFLNF-----YPLGEDIDIIENLKSTFTEPVLWRKDQHHR 148

QY 450 QEPVLPEVFGNLNSVMCEGEAGSGKTVLLKIAFLWASGCCPLNRFQLVFYLSLST 509

Db 149 VEQLTLNGLLQALQSPCIEGESGKGKSTLLQRIAMLWGSCKKALTQKFFVFFLRLS-- 206

QY 510 RPDEGLASII CDLLEKEGSVTENCMRNI IQOLKNQVLFLLDDYKEICSIPO--VIGKL 566

Db 207 RAQGLFETLCDQLDIPGTIRKQTFMAMLLKLRQRVFLLDGYNEF--KPQNCPEIEAL 264

567 IQKNHLSRTCLIAVRTNRARDIRRYLETILEIKAFFPYNTVCILRKLFSHNMTRLRKF 626

Db 265 IKENHRFKNMVIVTTTECLRHIRQFGALTAEGDMTEDSAQALIREVLIKELA--EGLL 322

627 VYFGKNQSLQIKTPLFVAICAHWFQYRPFDPSPFDDVAVEKSYMERLSLRNK-----A 680

Db 323 LQIQSRCLRMKTPLFVITCAIQMGESEFHSHTQTTLFHTFYDLLIQKNKHKKGVA 382

681 TAEILKATVSSCGELAKGFFSCCFEFNDDDLAEAGVDEDEDLTMCIMSKFTAQRRLRPFY 740

Db 383 ASDFIR-SLDHCGDLAEGVFSHKPDEFELQDV--SSVNEDVLLTTGLLCKYTAQRFXPKY 439

741 RFLSPAQEFLAGMRIELDSRQEHQDLGLYHLKQINSPMTVSAYNNFLNV--SSL 798

Db 440 KFFHKSFOEYTAGRRLSSLLTSHEPEEVTKNGNGYLQKMSISDITSTYSSLLRYTCGSSV 499

799 PSTKAGPKIVSHLLHLVDN-----KESLENISENDYDKHQPEISLQMQ 843

Db 500 EATRA---VMKHLAVYQHGLGLSLAKRPLWRQESLQSVKN-----TTEQEI 545

844 LRGWQICPQAYFSMWSEHLLVLAKTAYQSN-T-VAACSPFVLQFLQGRITLGA LNL-Q 901

Db 546 LKAI-----YQESTSKALSQEFFAFQCKSLYINSGNIPD 593

QY 902 YFEDHPESLSLRSIHPPIRGNKTSPPRAHFSVLETCFDKSQVPTIDQDYASAFEPMEWE 961

Db 594 YLFD-----FEEHL PNC--ASALDFIKLDFYGG--AMASWE 625

QY 962 RNLAEKEDNVKSYMĐQRASPDLDSTGYWKLSPKQYKIP-----CLEVDV 1006

Db 626 -----KAEDTGGIHMEAPETY-IPSRVSLFFNWKQEFRTLEVTL 666

QY 1007 NDIDVVGQDMEILMTVFSASQRIEHLNHSRGFIESIRPALELSKASVTKCSISKEELS 1066

Db 667 RDESKLNQDITYLGKIFSSATSLRLQIKRCAGVAGSLSLVLSTCK-NIYSLMVEASPLT 725

QY 1067 AAEQELLTPELESLEVSGTIOQODIFPN--LDKFLCLKELSVDEGNINVFVPIEE 1124

